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ABSTRACT

To update a 1977 study of indirect cost rates in Association of Research Libraries (ARL) member institutions, the Systems and Procedures Exchange Center (SPEC) contacted several member libraries and the National Association of College and University Business Officers (NACUBO) in 1980 for current information and documents. A number of ARL members conducted new studies and research in 1979 to produce revised data on library costs using new regulations for determining costs of federal contracts and grants. The kit comprises: (1) "Indirect Cost Calculation" (Washington University); (2) "Proposal for Conducting a Study of Reference Department Usage" (Washington University); (3) "Directions for Taking a Sampling of the Faxon List of Continuations" (Washington University); (4) "Indirect Cost Study" (University of Southern California); (5) "Cost Allocation Study" (University of Pennsylvania); (6) "Selected Support Materials from the Office of Sponsored Programs" (University of Virginia); (7) "Selected Materials from NACUBO Special Reports, March and June 1979 Issues" (NACUBO); (8) "University Libraries Use Study" (Cornell University); and (9) "Library Expense and Use Information Endowed 1975-76" (Cornell University). The concise summary that introduces the kit briefly discusses library responses to the revised cost principles and trends and issues. (THC)

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Indirect Cost Rates In Research Libraries

Kit 64

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May, 1980 No. 64
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Systems and Procedures Exchange Center

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INDIRECT COST RATES IN RESEARCH LIBRARIES

One year after the Ofice of Management and Budget (OMB) established the new principles under which colleges and universities determine costs of federal contracts and grants, a number of ARL members are conducting new studies and research to produce revised data on library costs that will satisfy the new federal requirements. A main concern in 1977 was the uncertainty surrounding federal requirements and the inconsistencies in reporting procedures. While that concern has been addressed by the new regulations, business officers are now facing demands brought about by more rigorous reporting procedures and by the need for more accurate and detailed statistics. At the same time, financial pressures require that universities receive equitable reimbursement for rising indirect costs.

Whereas a 1977 SPEC phone survey of 45 ARL members determined that there was little need for libraries to work with university financial officers to develop methods for allocating library costs, it appears that the role of the library has become more crucial in this effort in the past three years, in terms of gathering and analyzing increasingly detailed cost accounting information and in terms of developing improved methodologies for justifying equitable indirect cost payments. To update an earlier Flyer/Kit (#34, July 1977), SPEC has contacted several member libraries and the National Association of College and Business Officers (NACUBO) for current information and documents.

LIBRARY RESPONSES TO REVISED COST PRINCIPLES

OMB Circular A-21 issued in March of 1979 ended three and a half years of discussions and negotiations concerning how higher education institutions account for costs associated with federal research and training agreements. Part of this accounting involves indirect cost categories consisting of depreciation and use allowance, operation and maintenance, general administration and expenses, departmental administration, sponsored projects administration, student administration and services, and the library. Of the total indirect costs that are recovered by universities, library costs usually are found to represent less than 10 percent.

As the OMB considered the revision of the formula for determining library costs, it at one time had proposed to reimburse institutions for library expenses associated with research on the basis of a straight unweighted student and staff headcount. At that time, ARL, NACUBO, and the Association of American Universities all argued that the formula should take into account the extra expense associated with developing the extensive collections necessary to support the high level of faculty and graduate student research at research institutions. Most studies have shown that faculty and reseach staff use library materials 2-4 times as heavily as do undergraduate students. In response, the OMB changed the unweighted headcount base to a full-time equivalent base, with users to be divided

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into primary categories of FTE students, professional employees (faculty members and other full-time institution employees), and other users.

As libraries today work to develop new methods for allocating library costs, the main emphasis is on data concerning materials costs, salaries, and types of users, with studies tending to become more sophisticated. Researchers are looking at both public and technical services activities to determine staffing costs, and also are studying user categories in more detail. One updated methodology, for example, assigns library costs first to the principal library activities of collection processing and maintenance, public services, and administration, and then to either support of undergraduate or support of faculty and graduate students. Another institution designed a methodology to take into account different levels of efforts and costs for public services and technical services to support sponsored research. Four pools were established to distribute costs: Public Services Undergraduate, Technical Services Undergraduate, Public Services Graduate, and Technical Services Graduate. This study does not establish costs based on departmental responsibilities, but instead looks at the nature of tasks of individual staff members. Another library focuses on two general areas of expenditures: costs of public service and costs of books and periodicals.

TRENDS AND ISSUES

The new regulations have put additional pressures on higher education at a time when institutions are concerned with receiving equitable and just reimbursements for indirect costs because of increasing financial problems. Institutions also are concerned with unfavorable publicity concerning a lack of accountability that created congressional pressure and forced current strict controls.

To respond to these pressures, libraries must pull together their computerized and non-computerized files and data, and make the optimum use of existing statistics and resources in developing indirect cost study methodologies. The information available from the growing number of computerized circulation systems, for example, is proving helpful to several institutions. Such efforts usually call for expertise in the area of financial management and planning that is reflected in a budget officer position. A number of library business officers have been the principal researchers or authors of methodologies and are being called upon by institutional financial officers as knowledgeable experts in the area of library use costs. For many libraries, the analysis and cost accounting skills needed to deal with federal requirements are also proving helpful in other management information areas such as planning, decision-making, cost justification, and work/task measurement.

The updated kit on Indirect Cost Rates in Research Libraries (#64) contains six documents (87 pages) from ARL libraries and NACUBO. It is available to ARL members and SPEC subscribers for $7.50 and to others for $15.00, prepayment required, from SPEC, Association of Research Libraries, 1527 New Hampshire Ave., N.W., Washington, D.C., 20036.

ISSN 0160-3582

INDIRECT COST RATES IN RESEARCH LIBRARIES
KIT # 64 MAY 1980
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*Old Documents from 1976

INDIRECT COST CALCULATION - OLIN LIBRARY, WASHINGTON UNIVERSITY, ST. LOUIS
FALL AND SPRING, 1977-1978

This report outlines the methodology and reports the results of the efforts during the 1977-1978 school year at Washington University to collect data for indirect cost distribution. This study focused on two general areas of Library expenditures: 1) cost of public service, and 2) cost of books, periodicals, documents, etc.

To determine the cost of public service, two surveys were conducted. The first survey involved the percentage of time devoted to Library users at the reference desk. The second survey centered around the circulation of Library materials.

In collecting data relevant to the cost of books, periodicals, etc., a time analysis on a sampling basis was taken in the Cataloging department. The purpose of the analysis was to determine the processing time for those acquisitions classified as undergraduate material and those acquisitions classified as graduate or faculty material. Also, a sampling of blanket orders for monographs was taken. The Faxon list was sampled to determine the percentage of research and nonresearch continuations. A sampling was also taken of monograph continuations.

METHODS

Cost of Public Service

During the week of 11-17-77 during the fall and the week of 4-10-78 in the spring surveys were taken at the reference desk at Olin Library. Four user groups were defined for this study: 1) Washington University graduate students, 2) Washington University undergraduate students, 3) Washington University faculty/Professional, and 4) other. The purpose of this particular survey was to identify users and determine the percentage of time reference desk personnel spent answering questions for each group. Time sheets were kept Monday through Thursday from 8:00am until 10:00pm, Friday from 8:00am til 6:00pm, Saturday from 9:00am til 6:00pm, and Sunday from 1:00pm until 10:00pm. Separate records were kept for those questions received over the phone and those received in person.

Questions asked were divided into three major classifications. The first category of questions was defined as "directional". Those questions which required five minutes or less to answer were classified as "ready reference" questions and those questions which required over five minutes to answer were categorized as "research" questions. Hatch marks were used to indicate the status of users under both the "directional" and "ready reference" questions. Actual time in minutes was used for recording "research" questions. A copy of the proposal for the study, the instructions for filling out data sheets, a sample data sheet, and the results from the survey are presented in exhibits 1-1 through 1-4, respectively.

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A circulation survey was conducted at seven points in Olin Library and the nine departmental Libraries during the week of 11-14-77 and the week of 3-27-78. The Law Library, Medical and Dental Libraries were not included in this survey. Questionnaires were distributed to all persons checking out materials at any of the locations at Olin or the departmentals during three one hour intervals on weekdays, one two hour interval and two one hour intervals on weekends. The distribution times were 11:00am until noon, 3:00pm til 4:00pm, and 7:00pm til 8:00pm Monday through Friday, and 2:00pm til 4:00pm and 7:00pm til 8:00pm on weekends. In this survey the status of the user was identified and the number of titles checked out was determined. A copy of the proposal for this study, the directions for conducting the survey, a copy of the questionnaire used, and the results are displayed in exhibits 1-5 through 1-9, respectively.

A separate circulation survey was conducted at the Medical School Library during the week 12-05-77 and the week of 4-24-78. The questionnaire used during the fall survey was somewhat different from the form used at Olin , as the Librarian at the Medical Library was interested in collecting additional information. However, the same type of circulation data was extracted from these forms as was collected from the forms used at Olin. During the spring survey the same forms were used at all the libraries. The Medical School survey was conducted Monday through Friday from 10:00am until noon and from 3:00pm until 4:00pm. Saturday and Sunday the questionnaires were distributed from 3:00pm until 5:00pm. Exhibits 1-10 and 1-11 present a copy of the survey used and the resultant data.

Cost of Books, Periodicals, Documents, etc.

Approximately every two weeks a shipment of monographs in the English language is received. These particular monographs are received as a result of a blanket order. This type of order accounts for about 21% of the total book budget. Each title comes with a card listing, among other information, the title's price and the academic level. The cards from all of the books received 10-28-77 and those received 4-6-78 were collected and categorized according to user group. The cost of the titles within each group was also totaled. Exhibit 1-12 displays the findings of this sampling.

All books received at Olin Library must be processed by the Cataloging department. Both original cataloging and cataloging with Library of Congress copy are performed within this department. There are three processes a title may go through within this department: 1) searching, 2) input, and 3) cataloging.

A time analysis was kept during the week of 12-15-77 and the week of 4-17-78. A title was first classified as research or nonresearch. This classification was based upon general guidelines and the professional judgement of the department head. These guidelines are listed in exhibit 1-13. Individuals performing each of the three functions - search, input, and cataloging - classified each title and recorded the time, in minutes, spent working on each title. This data is tabulated in exhibit 1-14.

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In order to determine the percentage of continuations ordered for each user group and the cost associated with each group, the Faxon List was sampled. This list represents approximately 20% of Olin Library's continuations. A detailed explanation of how this sampling was handled is given in exhibit 1-15. The results are presented in exhibit 1-16.

The monograph continuations were recorded and classified for one week during the spring. The results are tabulated in exhibit 1-17.

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PROPOSAL FOR CONDUCTING A STUDY
OF REFERENCE DEPARTMENT USAGE

1. A brief data sheet has been prepared for determining the following:

   a. Types of questions asked (directional, ready reference, research)

   b. Status of users (Undergraduate, graduate, faculty/staff, other)

   c. The time devoted to each user in answering each question

2. Ready reference questions are defined as questions taking not more than 5 minutes. Research questions are those taking more than 5 minutes to answer.

3. There are separate data sheets for recording in-house users and telephone requests.

4. These data sheets will be kept by the following people:

   a. Reference desk attendant, Olin library

5. Using these data sheets, a sampling will be taken twice during the academic year; once in the fall semester and once in the spring semester.

6. This data will be recorded for one week in each semester during the following periods:

   a. Monday - Thursday
      1. 8 am - 10 pm

   b. Friday
      1. 8 am - 6 pm

   c. Saturday
      1. 9 am - 6 pm

   d. Sunday
      1. 1 pm - 10 pm

. the collected data from these sheets will be tabulated by hand.

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REFERENCE DEPARTMENT SURVEY

The purpose of this survey is to collect data from Olin Library on:

1. The frequency that the three types of questions (directional, ready reference, or research) are asked.
2. The status of the users (undergraduate, graduate, faculty/staff, or others) within these three categories.

DIRECTIONS FOR FILLING OUT THE DATA FORMS

1. Indicate the date that the survey is being taken and from which library(Olin,Music,Business,etc.) the data is being collected.
2. There are 2 data sheets. One is for collecting data on in-house users, the other is for collecting data about telephone users. These sheets are marked accordingly.
3. Use a hatch mark in the appropriate space to indicate a user except in the case of a "research" question (a question taking over 5 minutes to answer). In this case, enter the approximate number of minutes required to answer the question. Separate these entries with slash marks.

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DATE 11/7-13/77 (Mon.-Sun.) (TELEPHONE)

TYPE OF QUESTION	DIRECTIONAL				READY REFERENCE (less than 5 min.)				RESEARCH (more than 5 min.)				
USER	UNDERGRADUATE	GRADUATE	FACULTY/ STAFF	OTHER	UNDERGRADUATE	GRADUATE	FACULTY/ STAFF	OTHER	UNDERGRADUATE	GRADUATE	FACULTY/ STAFF	OTHER	TOTAL
8 - 9													
9 - 10													
10 - 11													
11 - 12												1	
12 - 1													
1 - 2													
2 - 3													
3 - 4													
4 - 5													
5 - 6													
6 - 7													
7 - 8													
8 - 9													
9 - 10													

900

REFERENCE DEPARTMENT SURVEY
7-77

TYPE OF QUESTION	DIRECTIONAL		READY REFERENCE		RESEARCH		
USER STATUS	NO. OF QUESTIONS	% OF QUESTIONS	NO. OF QUESTIONS	% OF QUESTIONS	NO. OF QUESTIONS	% OF QUESTIONS	AVERAGE TIME PER QUESTION
Undergraduate	150	40.76%	281	36.88%	17	16.04%	14.3 min.
Graduate & Faculty/Professional	97	26.36%	297	38.97%	50	47.17%	15.0 min.
Other	121	32.88%	184	24.15%	39	36.79%	14.5 min.
TOTALS	368	100.00%	762	100.00%	106	100.00%	

REFERENCE DEPARTMENT SURVEY
4-10-78

TYPE OF QUESTION	DIRECTIONAL		READY REFERENCE		RESEARCH		
USER STATUS	NO. OF QUESTIONS	% OF QUESTIONS	NO. OF QUESTIONS	% OF QUESTIONS	NO. OF QUESTIONS	% OF QUESTIONS	AVERAGE TIME PER QUESTION
Undergraduate	170	52.52%	293	41.81%	24	27.93%	12.2 min.
Graduate & Faculty/Professional	67	20.71%	194	27.71%	32	37.20%	16.7 min.
Other	87	26.77%	214	30.48%	30	34.87%	15.8 min.
TOTALS	324	100.00%	701	100.00%	86	100.00%	

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WASHINGTON UNIVERSITY LIBRARIES

INSTRUCTIONS FOR DISTRIBUTING CIRCULATION SURVEY QUESTIONNAIRES

1. These questionnaires are to be distributed to all persons checking out library materials during the periods indicated below. Titles charged for in-library use are included in the survey as well as those for outside use.

   a. Monday - Saturday
      1. 11 am - 12 noon
      2. 3 pm - 4 pm
      3. 7 pm - 8 pm

   b. Sunday
      1. 2 pm - 4 pm
      2. 7 pm - 8 pm

   If for some reason the distribution of the questionnaires begins late, start distributing them and continue for a full hour.

2. To identify the library distributing the questionnaire, note the name of the library or unit by code number in upper left-hand corner, or stamp the name in the upper right-hand corner.

3. Number the questionnaires sequentially, beginning with the number "1" at the beginning of each day. At 8 p.m. each day, note the number of the last questionnaire distributed and the date, and send to Ms. Bobbitt in care of Library Administrative Office, Box 1061. You may send the last numbered blank questionnaire for the day for this purpose, if you wish.

4. The questionnaire should be filled out even though a user has filled one out previously.

5. There will be a container for the completed questionnaires at Exit Control in Olin Library and some special place for leaving them should be clearly marked in the branch libraries, preferably at the circulation desk.

A-1 Circ. - Level 3	B-1 Art & Arch.
A-2 Reserve	B-2 Biology
A-3 Serials	B-3 Business
A-4 Reference	B-4 Chemistry
A-5 Documents	B-5 Earth & Planetary Sciences
A-6 Urban Studies	B-6 East Asian
A-7 Special Coll.	B-7 Music
	B-8 Physics
	B-9 Social Work

PROPOSAL FOR CONDUCTING A STUDY
OF LIBRARY MATERIALS CIRCULATION

1. A brief questionnaire has been prepared for determing the following:

   a. Institutional affiliation (Washington Univ. or other)

   b. Academic status (Undergraduate, graduate, faculty/staff, other)

   c. The number of titles being checked out.

2. This questionnaire will be distributed at the following points:

   a. Olin Library
      1. Circulation Desk, level 3
      2. Reference Desk, level 3
      3. Reserve Desk, level 4
      4. Documents/Urban Studies, level 2
      5. Special Collections, level 5

   b. Departmental Libraries

   c. School Libraries

3. Using this questionnaire, a sampling will be taken twice during the academic year; once in the fall and once in the spring semesters.

4. To obtain a sample the questionnaires will be distributed for one week in each semester during the following periods:

   a. Monday - Saturday
      1. 11 am - 12 am
      2. 3 pm - 4 pm
      3. 7 pm - 8 pm

   b. Sunday
      1. 2 pm - 4 pm
      2. 7 pm - 8 pm

   These periods have been determined as the peak periods of circulation and reference desk usage.

5. The questionnaires will be collected at Exit Control of Olin as the user leaves the library or they will be collected by the desk attendant at the departmental and school libraries.

6. The collected data from the questionnaires will be tabulated by hand.

010

Location Code:_____
Number_____

WASHINGTON UNIVERSITY LIBRARIES
CIRCULATION SURVEY QUESTIONNAIRE

We shall appreciate very much your cooperation in completing this short questionnaire while in the Library. Since we are conducting this survey during the entire week (at selected hours), you may have completed the form on a previous visit. If so, it is important that you fill it out again. Your participation will be helpful in determining the Library's role in the areas of teaching and research. Please leave completed questionnaires at the Exit Control desk (Olin Library), or Circulation desk (school, departmental library).

Renata Rotkowicz
Acting University Librarian

1. Date_____

   Approximate time_____

2. Institutional Affiliation:

   _____Washington University, or

   _____Other

3. Number of titles you charged out this visit for:

   _____in-building use

   _____outside use

4. Academic Status

   _____Faculty/Professional, or

   _____Graduate, or

   _____Undergraduate, or

   _____Other

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CIRCULATION SURVEY - OLIN LIBRARY ONLY
11-14-77

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Undergraduate & Other Wash. Univ.	444	58.1%	769	47.8%
Graduate & Faculty/Professional	304	39.8%	759	47.8%
Non Wash. Univ.	16	2.1%	69	4.4%
TOTALS	764	100.0%	1588	100.0%

CIRCULATION SURVEY - OLIN AND DEPARTMENTALS
(Does not include medical, law, or dental)

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Undergraduate & Other Wash. Univ.	839	48.7%	1467	46.6%
Graduate & Faculty/Professional	876	49.6%	2115	55.8%
Non Wash. Univ.	52	1.7%	206	5.5%
TOTALS	1767	100.0%	3788	100.0%

CIRCULATION SURVEY - OLIN LIBRARY ONLY
3-27-78

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Undergraduate & Other Wash. Univ.	283	55.9%	527	45.8%
Graduate & Faculty/Professional	207	40.9%	564	49.0%
Non. Wash. Univ.	16	3.2%	59	5.2%
TOTALS	506	100.0%	1150	100.0%

CIRCULATION SURVEY - OLIN AND DEPARTMENTALS
(Does not include medical, law, or dental)

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Undergraduate & Other Wash. Univ.	645	44.1%	1270	34.4%
Graduate & Faculty/Professional	756	51.7%	2193	59.3%
Non Wash. Univ.	61	4.2%	235	6.3%
TOTALS	1462	100.0%	3698	100.0%

Date Thursday 12/8
Time 2 p.m. PM.

Number 525

Washington University School of Medicine Library
Library Use Survey Questionnaire

We shall appreciate very much your cooperation in completing this questionnaire while in the Library. Since we are conducting this survey during the entire week (at selected hours), you may have completed the form on a previous visit. However, it is important that you fill it out again. Your participation will be helpful in determining the Library's role in the areas of teaching and research. Please leave completed questionnaires at the desk as you leave the Library.

Estelle Brodman
Librarian and Professor of Medical History

1. Institutional Affiliation:

   X Washington University
   ___ Washington University Medical Center Hospital
   ___ Other (please specify)

2. Academic Status:

   ___ Faculty/Professional (Research Assistant, Research Associate)
   ___ House Staff
   X Graduate Student (Medical School, Dental School, Occupational Therapy, Physical Therapy, Health Care Admin., Allied Health)
   ___ Undergraduate Student (Allied Health)
   ___ Other (please specify)

3. What brought you to the Library

   ___ An assignment
   ___ For browsing
   ___ Research problem
   ___ Clinical problem
   X Other - reading in comfortable chair

4. Did you find what you wanted? (Material)
   NA

   If "no" was it:
   ___ Out to some other reader. If so was it overdue? ___
   ___ Missing
   ___ Not owned by Library
   ___ At bindery
   ___ Other

5. Did you find what you wanted (information) NA

6. Did you read in:

   X The main reading room (1st floor)
   ___ The stack carrels
   ___ The conference rooms
   ___ The basement study rooms

7. Did you use:

   ___ Printed materials
   ___ Audiovisual material
   ___ Computer indexes
   X Other - my own mind

8. Did you get help from the Library staff? No
   If so, was it:

   ___ Circulation staff
   ___ Reference librarians
   ___ Interlibrary loan staff
   ___ Photocopy staff
   ___ Other

9. Did you:

   X Read material in the Library
   ___ Photocopy material
   ___ Borrow materials. If so, how many items ___

10. Do you have any suggestions for the Library to consider?

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WASHINGTON UNIVERSITY MEDICAL SCHOOL LIBRARY

INSTRUCTIONS FOR DISTRIBUTING LIBRARY USE SURVEY QUESTIONNAIRES

1. These questionnaires are to be distributed to all persons entering the library during the periods indicated below.

   a. Monday - Friday

      10 am - 12 noon
      3 pm - 4 pm

   b. Saturday - Sunday

      3 pm - 5 pm

2. The questionnaires should be numbered sequentially, beginning with the number "1". At the end of the week (Sunday, Dec. 11, 5 pm) note the number of the last questionnaire distributed.

3. The questionnaire should be filled out even though a user has filled one out previously.

4. There will be a container at the exit desk for collecting completed questionnaires.

12/1/77

CIRCULATION SURVEY - MEDICAL SCHOOL LIBRARY
12-05-77

WASHINGTON UNIVERSITY AFFILIATION

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Undergraduate	3	5.67%	9	10.34%
Graduate & Faculty/Professional	46	86.79%	72	82.76%
House Staff	2	3.78%	2	2.3%
Technical	1	1.88%	2	2.3%
Other	1	1.88%	2	2.3%
TOTALS	53	100.00%	87	100.00%

WASHINGTON UNIVERSITY MEDICAL CENTER HOSPITALS

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Faculty/Professional	11	61.10%	24	66.67%
House Staff	6	33.30%	8	22.22%
Other	1	5.60%	4	11.11%
TOTALS	18	100.00%	36	100.00%

NON WASHINGTON UNIVERSITY AFFILIATION

Garduate & Faculty/Professional	2		6	

CIRCULATION SURVEY - MEDICAL SCHOOL LIBRARY
4-24-78

USER STATUS	NO. OF USERS	% OF USERS	NO. OF TITLES	% OF TITLES
Undergraduate & Other Wash. Univ.	8	8.2%	19	9.1%
Graduate & Faculty/Professional	88	89.8%	187	89.1%
Non Wash. Univ.	2	2.0%	4	1.8%
TOTALS	98	100.0%	210	100.0%

BAKER AND TAYLOR DISPLAY
10-28-77

ACADEMIC LEVEL	NO. OF TITLES	% OF TOTAL TITLES	COST	% OF TOTAL COST
Undergraduate & General Supplementary	192	46.16%	$2261.98	37.73%
Graduate & Professional	224	53.84%	$3733.32	62.27%
TOTALS	416	100.00%	$5995.30	100.00%

BAKER AND TAYLOR DISPLAY
4-06-78

ACADEMIC LEVEL	NO. OF TITLES	% OF TOTAL TITLES	COST	% OF TOTAL COST
Undergraduate & General Supplementary	117	44.00%	$1600.24	38.60%
Graduate & Professional	149	56.00%	$2543.02	61.40%
TOTALS	266	100.00%	$4143.26	100.00%

WASHINGTON UNIVERSITY LIBRARIES

Catalog Department Sampling

Directions

1. Indicate whether the title required original cataloging or whether it came with L.C. copy
2. Indicate the time in minutes that it took to catalogue the title
3. Indicate whether the title is research or nonresearch

Determining the academic level of a title

1. All foreign titles shall be classified as research.
2. All original cataloging shall be classified as research.
3. Publications of specialized research agencies shall be classified as research.
4. Publications of a documentary nature (reports of union conventions, proceedings, government publications) shall be classified as research.
5. All publications not classifiable within the above categories shall be handled in the following manner:

   The individual examining each publication will ask himself the following question -- "If the University has no instructional program dealing with the subject matter of this book, would it still be purchased?" If the answer is yes, the publication shall be classified as research. If not, it will be classified as nonresearch.

Date_____

Cataloging Department

TITLE	ORIGINAL	L.C. COPY	TIME (MINUTES)	RESEARCH	NONRESEARCH
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

CATALOGING DEPARTMENT TIME ANALYSIS
12-15-77

	TOTAL TITLES	RESEARCH	TOTAL TIME	TIME/ TITLE	NONRESEARCH	TOTAL TIME	TIME/ TITLE	% DIFFERENCE
CATALOGING	352	62 (17.61%)	1603 min.	25.9 min.	290 (82.39%)	2987 min.	10.3 min.	60.15 % longer to do research titles
SEARCH	204	114 (55.88%)	1803 min.	15.8 min.	90 (44.12%)	883 min.	9.8 min.	37.99% longer to do research titles
INPUT	42	32 (76.19%)	362 min.	11.3 min.	10 (23.81%)	74 min.	7.4 min.	34.59% longer to do research titles

CATALOGING DEPARTMENT TIME ANALYSIS
4-17-78

	TOTAL TITLES	RESEARCH	TOTAL TIME	TIME/ TITLE	NONRESEARCH	TOTAL TIME	TIME/ TITLE	% DIFFERENCE
CATALOGING	170	70 (41.20%)	1922 min.	27.5 min.	100 (58.80%)	1234 min.	12.3 min.	55.06 longer to do research titles
SEARCH	128	117 (91.40%)	1551 min.	13.3 min.	11 (8.60%)	68 min.	6.2 min.	53.39% longer to do research titles
INPUT	11	6 (54.50%)	83 min.	16.6 min.	5 (45.50%)	69 min.	13.8 min.	16.87% longer to do research titles

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019

DIRECTIONS FOR TAKING A SAMPLING OF THE FAXON LIST OF CONTINUATIONS

A list has been provided specifying the number of titles to be taken from each Subject Class. Begin with the first title listed in that Subject Class and use this as the first title. Then take every 8th title in the Subject Class until the required number for that class has been taken. (i.e. titles 1,9,19,25). This procedure is to be repeated for each of the 23 Subject Classes of the Faxon list.
For example, Subject Class G would include titles 1,9,and 17.

List the required information on each title on an index card provided. Indicate the Subject Class from which the title has been taken and from which page of the Faxon list it was taken. (The page numbers are in the upper right hand corner of theFaxon list)

Indicate the title of the material in the space provided.

To determine whether the title belongs in the teaching category or the research category, use <u>The Classified List of Periodicals For The College Library</u> by Farber. Each title must be looked up in the index of this publication. If the title in question is listed in this book, then it will fall into the teaching category. If it is not found in this book it is a research title.

In [illegible] the price of the title. This figure is [illegible] the first column labeled "amount". If the words "per this" appear, refer to the price

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PROPORTIONED SAMPLING OF THE FAXON LIST

The Faxon list is divided into 23 subject classes.

A thru H

L thru N

P thru V

X,Z, and MISC.

The total number of titles included in this list is 1346. This total is divided among these 23 subject classes.

To determine what percent of the total each subject class represented the number of titles in each subject class was divided by the total (1346).

The sample size is 150. To determine the number of titles to sample from each subject class, the total (150) was multiplied by the percentage arrived at in the previous step.

EXAMPLE:

total number of titles	1346
number of titles in subject class G	27
percent of total	$\frac{27}{1346} = 2\%$
number of titles to sample from subject class G	$(.02)(150) = 3$

To sample the titles from the Faxon list:

1. The first title for the sampling for each subject class will be the first title of that subject class.
2. Take every 8th title (1,9,17,etc.) until the number required for that subject class has been taken.

EXAMPLE:

For subjcet class G the sampling would include titles 1,9,and 17.

These titles will be checked against titles listed in the Classified List Of Periodicals For The College Library by Farber.

Those titles found in the Farber publication will be considered teaching material and those not found in the publication will be considered research material.

The following information will be colledted from each title and recorded on index cards:

1. The Subject Class of each title in the sampling.
2. The page number of the Faxon list from which the title was taken.
3. The title of the continuation
4. The classification of each title (research of teaching)

PROPOSAL FOR SAMPLING THE
FAXON LIST OF CONTINUATIONS

SUBJECT CLASS_____ PAGE NO._____

TITLE_____

RESEARCH_____ PRICE

TEACHING_____

EXAMPLE of the index cards to be used in the sampling of the Faxon list.

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[illegible] FOR [illegible] THE
F [illegible] OF [illegible]

Determining the number of titles to take from each Subject Class

Subject Class	Number of titles to take
A	8
B	10
C	10
D	4
E	1
F	4
G	3
H	20
J	3
K	1
L	5
M	2
N	2
P	8
Q	25
R	4
S	1
T	10
U	1
V	1
X	1
Z	4
MISC.	22
TOTAL	150

CONTINUATIONS - MONOGRAPHS
SPRING 1978

	NO. OF TITLES	% OF TITLES	COST	% OF TOTAL COST
RESEARCH	43	44.3%	$1752	50.5%
NONRESEARCH	54	55.7%	$1717	49.5%
TOTALS	97	100.0%	$3469	100.0%

CONTINUATIONS - SAMPLING OF THE FAXON LIST
FALL AND SPRING, 1977-1978

	NO. OF TITLES	% OF TITLES	COST	% OF TOTAL COST
RESEARCH	33	23%	$2592	52%
NONRESEARCH	110	77%	$2393	48%
TOTALS	143	100%	$4985	100%

TOTAL CONTINUATIONS BUDGET	$ 468,000
TOTAL FAXON BUDGET	$ 48,515
TOTAL FOREIGN BUDGET	$ 145,124

The foreign budget is 31% of the total budget. Of this 31%, 15% was assumed to be nonresearch and the remainder to be research. The remaining 69% of the total budget was divided between 52% for research and 48% for nonresearch. This latter division assumes that the Faxon sampling is representative of the English language continuations. Thus the total continuations budget can be divided as follows

RESEARCH	62.4%
NONRESEARCH	37.6%

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INDIRECT COST STUDY

UNIVERSITY OF SOUTHERN CALIFORNIA

Prepared by

Linda P. Crismond
Assistant University Librarian
1-11-80

In 1977, the University established a Cost Analysis Office whose principal responsibility was to develop a detailed indirect cost study of all University operations. At that time the University's indirect cost rate was 43%, and it was felt that the rate could be dramatically improved if an intensive study were undertaken. After the initial study was completed and audited, the rate was moved officially to 65%. For the 1979-80 year, a provisional rate was established at 72%, pending a complete audit.

The Library had not participated in any of the studies prior to 1977. After a series of discussions between the Library and the Cost Analysis Office, a mutually acceptable methodology was proposed to HEW, the auditing agency responsible for USC's government contracts. The proposal was accepted, and the study described below was completed.

One of the principal premises in designing the study was to recognize that there were different levels of effort and costs to support sponsored research in technical services support and public services operations. It was felt that one formula used to allocate all the Library salaries and wages would be unsatisfactory and that both of the operations needed a separate formula.

The Library study resulted in the establishment of four pools which distributed all Library costs: public services - undergraduate, technical services - undergraduate, public services - graduate, and technical services - graduate. The latter two pools were then refined by the Cost Analysis Office to establish the portion to be applied to sponsored research.

LIBRARY EFFORT SURVEY

Rather than establishing costs based on formal departmental assignments, a library effort survey was used to identify the nature of the tasks being performed by the individual staff members. This showed the number of hours that staff in the Technical Services Division spent on public services tasks and the number of hours that the Public Services Division spent on technical services activities. Administration performed both public and technical services tasks, and all three groups required an "other" category.

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Each year for a one week period all Library employees, including part-time help and student workers, are asked to record the total number of hours spent on public services, technical services and other activities. They are provided with an instruction sheet (Exhibit A) which lists examples of tasks to be attributed to the three main categories. A tabulation sheet (Exhibit B) is provided on which they indicate the hours spent in the three categories. They are requested to indicate on this sheet if the work week was typical.

These forms are returned to the Department Head where they are consolidated onto a Supervisor Summary From (Exhibits C and D). The Department Head is then asked to state the percentage of the technical services hours which were spent on serving the undergraduate programs at USC. The methodology used in establishing these percentages will be described in the next section.

The summary sheets are then tabulated, both in terms of time and in terms of real staff dollars. The resultant calculation divides the Library salaries and wages into two cost pools, technical services and public services. The "other" salaries and wages are split proportionally between the two pools. Book and serials and bindery expenditures are added to the technical services pool, and all other library expenses are split proportionally between the two pools.

TECHNICAL SERVICES DISTRIBUTION

Several studies were conducted within the Technical Services Division to establish the percentage of their hours spent on serving the undergraduate population. Each Department Head in Public Services conducted his or her own study to identify the percentage of technical services hours spent on undergraduates in their branch or department.

A title attribution study was conducted to identify those titles currently being processed which were acquired to benefit the undergraduate and graduate programs. An experienced professional librarian who had been selecting materials for the Library collection for more than thirty years was assigned to review all monographic materials processed by the Catalog Department during two two-week periods, one in the Fall and one in the Spring. Since an undergraduate designation was the easiest to identify, she was asked to tabulate the number of all materials falling in that category. Those remaining included graduate, research, and staff materials and were labeled as "graduate." The "graduate" percentage was used to allocate the book budget, the Acquisitions and Accounting Departments salaries and wages and all salaries and wages in the Catalog Department with the exception of the original cataloging unit. The study completed in the Fall of 1979 showed that 64% of the monographs were in the "graduate" category.

A separate review was made of the material processed by the professional original catalogers and their support staff. It

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was found that 100% of the material processed by the professional staff should be identified with the "graduate" category.

Costs associated with the acquisition, processing, and binding of serials were analyzed separately. The book by Evan I. Farber, A Classified List of Periodicals for the College Library (Fifth revised edition; Faxon, Westwood, Mass.; 1972) was used to identify those serial titles appropriate and necessary for support of undergraduate instruction. Farber's list was compared with the USC Union List of Serials. The costs for titles (and multiple subscriptions) found on both lists were attributed to undergraduate, and the costs for all other titles were attributed to "graduate." The "graduate" percentage was used to allocate the serials and bindery budgets and the salaries and wages of the Serials and Bindery Departments. The study completed in the Fall of 1979 showed that 94.1% of all serials were in the "graduate" category.

The Gifts and Exchange Department costs were allocated based on a survey by the Department Head of material waiting to be processed. The study completed in the Fall of 1979 showed that 47% of the materials were in the graduate category.

The number of technical services hours, the salaries, wages, materials and binding costs, and the undergraduate and "graduate" percentages are then input into the computer by the Cost Analysis Office. A dollar amount was established for the "graduate" technical services pool. Using a head count allocation, the "graduate" pool was split into two pools, one for graduates and one for faculty/staff. The sponsored research portion of the graduate pool was separated, based on a University survey of all student hours, which divides their hours into sponsored research or instruction. Similarly, the sponsored research of the faculty/staff pool was identified based on the results of a University survey of salaries and wages of staff and faculty which divides their salaries into sponsored research or instruction.

LIBRARY USERS SURVEY

The public services costs were allocated based on the results of a users survey. The users survey is conducted during a two week period in the Fall and in the Spring. Eighty two-hour survey periods are chosen randomly. Student workers paid by the Cost Analysis Office hand out a survey sheet (Exhibit E) at selected branches and departments. During the last survey 12,178 sheets were returned, of which 245 were rejected for tabulation.

The survey asks the user to identify if he/she is an undergraduate, graduate, faculty/staff or other, the primary purpose for using the Library (instruction, sponsored research, individual research, independent faculty research or other), with which school he/she is affiliated, and the number of "items" (defined as an object or single service) he/she used. The survey sheet answers are input into a computer where the data are compared and analyzed.

The number and percentage of undergraduates, graduates, faculty/staff and others who are using the Library for sponsored research is tabulated. A ratio (usage factor) is developed of the number of "items" used for sponsored research by the individuals in the four categories. A profile of the total population using the Library for sponsored research is established based on the percentages derived in the survey. These figures are weighed by the usage factor to derive the percentage of items which are used for sponsored research. To this is added a percentage of the salary costs for sponsored research training. The final percentage is used to identify the public services costs for sponsored research.

The Cost Analysis Office will most likely separate the items used from the services rendered in the next users survey. Since service requires a greater amount of staff time, it seems appropriate to give it a greater weight.

UNIVERSITY OF SOUTHERN CALIFORNIA
FINANCIAL SERVICES DIVISION
OFFICE OF COST ANALYSIS

Library Effort Survey
Staff Form*

Instruction Sheet

1. Each day during the week of the survey, please record on the form provided the total number of hours spent performing each of the library functions described below.

   a. Public Services (P.S.) includes all services provided to the library user after the materials have been made available. These activities refer to reserve materials and reference assistance, library use guidance and instruction, and circulation maintenance (i.e., shelving, shelf reading and handling overdues). Time spent in the administration and supervision of public service facilities is also included.

   b. Technical Services (T.S.) includes all activities relating to material selection, acquisition, and shelf preparation and organization. Specific technical services are book binding, gifts and exchange, and serials. Interlibrary loan procedures also are considered to be part of Technical Services.

   c. Other Activities (O.A.) includes miscellaneous activities such as general staff meetings, other administrative and personnel responsibilities, and employee break periods (excluding lunch).

2. Please sign the form before returning it to your supervisor. Thank you for your assistance.

* To be completed by all full - and part-time employees except work-study students.

UNIVERSITY OF SOUTHERN CALIFORNIA
FINANCIAL SERVICES DIVISION
OFFICE OF COST ANALYSIS

Library Effort Survey

_____
department

__/__/__ thru __/__/__
date

Distribution of Work Effort

Day	Date	P.S.	T.S.	O.A.	Total Hours Worked
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					
Sunday					
Total Hours		____	____	____	

Would you categorize this as a typical work week?

YES____ NO____ (Explain briefly)

The above table represents the distribution of my work effort during the week surveyed.

_____
(employee signature)

employee name_____
(please print)

job title_____

_____
(supervisor signature)

UNIVERSITY OF SOUTHERN CALIFORNIA
FINANCIAL SERVICES DIVISION
OFFICE OF COST ANALYSIS

Library Effort Survey
Supervisor Summary Form*

Instruction Sheet

Section I

1) Collect all staff members' forms. Copy the information from each staff member's form to the chart in Section I of the Summary Form. Record on a separate sheet of paper all questions or qualifying statements made by staff members during the survey process.

2) Retain for your records, copies of the staff members' forms and all documentation supporting the Summary Form.

Section II

3) For each day during the week of the survey, record, in percentage terms, your estimate of the total amount of staff time spent on those Technical Services (T.S.) provided for the undergraduate program. A staff members' time spent processing publications ordered by faculty or students for undergraduate courses, or any material specifically acquired because of the undergraduate program should be included in your estimate. In other words, this percentage represents the ratio of Technical Service costs incurred for the benefit of undergraduates to total T.S. costs of your department.

   Since the procedures used to estimate the percentage of undergraduate support provided in each department may vary, your professional judgement is requested to determine the most appropriate methodology for your department. As an example, the serial department may decide to use a publication which recommends serial titles for a four-year liberal arts college as a guide to estimate the portion of the University serial collection provided for undergraduate support. An appropriate reference, in this case, would be Farber, Evan S., The Classified List of Periodicals for the College Library, published by F.W. Faxon Company, Westwood, MA. in 1972.

   Please retain for your records, all documentation supporting your methodology and estimates.

4) Please sign all staff members' forms and the supervisor's summary form. Return to the Librarian's Office unless otherwise notified. Thank you for your assistance.

* If you have any questions, please contact the Office of Cost Analysis at Extension 7250.

UNIVERSITY OF SOUTHERN CALIFORNIA
FINANCIAL SERVICES DIVISION
OFFICE OF COST ANALYSIS

Library Effort Survey
Supervisor Summary Form

SECTION I

Employee Name	Job Classification	Monday P.S.	Monday T.S.	Monday O.A.	Tuesday P.S.	Tuesday T.S.	Tuesday O.A.	Wednesday P.S.	Wednesday T.S.	Wednesday O.A.	Thursday P.S.	Thursday T.S.	Thursday O.A.	Friday P.S.	Friday T.S.	Friday O.A.	Saturday P.S.	Saturday T.S.	Saturday O.A.	Sunday P.S.	Sunday T.S.

SECTION II

Undergraduate ___ of Technical Services
(retain all documentation to support your estimate)

Would you categorize this as a typical work week?

YES___ NO___ (Explain briefly)

The above table is an accurate representation of the distribution of time expended by the staff of this department during the sample period reported in accordance with the instructions.

SIGNED_____

TITLE_____

DATE_____

031

Rev.

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USC LIBRARY USER SURVEY
SPRING 1979

Location 1E3 (Col. 1)

Sample Date _____ (Col. 2)

FOR OFFICIAL USE ONLY

This is a University-wide survey. A new form must be completed each time the library is used. Please deposit completed form in box, located on librarian's desk, when you leave.

1. I am a (select 1 only)*

(Col. 3)

- ☐ 1. USC Undergraduate (Freshman, Sophomore, Junior, or Senior)
- ☐ 2. USC Graduate Student (including Law, Dental, Medicine, other professional school, etc)
- ☐ 3. USC Faculty/Staff Member
- ☐ 4. Other USC (spouse, alumnus, etc.)
- ☐ 5. Non-USC

* If you are using the library on behalf of another person (e.g., a secretary for a faculty member), please answer for that person.

3. During This Visit To The Library

How many library items* did you use?

_____ (Col. 7-8)

*A library item is any object (book, microfilm, etc.) or service (technical assistance, direction is use of library, etc.)

4. What is the primary purpose of using the Library? (Col. 9)

- ☐ 1. Instructional or course-related (include term paper, study etc.)
- ☐ 2. Sponsored research (government or other grants or contracts)
- ☐ 3. Individual research (theses, dissertations, etc.)
- ☐ 4. Independent Faculty Research (not sponsored)
- ☐ 5. Other

2. My USC School is (select 1 only)

(Col. 4)

- ☐ A. Annenberg/Communications
- ☐ B. Architecture/Fine Arts
- ☐ C. Business Administration
- ☐ D. Continuing Education
- ☐ E. Dentistry
- ☐ F. Education
- ☐ G. Engineering
- ☐ H. Gerontology
- ☐ I. Hancock
- ☐ J. LAS (e.g. English, Biology, Sociology, etc.)
- ☐ K. Law
- ☐ L. Library Science
- ☐ M. Medicine
- ☐ N. Performing Arts
- ☐ O. Pharmacy
- ☐ P. Public Administration
- ☐ Q. Saftey & Systems Management
- ☐ R. Social Work
- ☐ S. Urban and Regional Planning
- ☐ T. Other USC
- ☐ U. Other non-USC, please specify

_____

44 035

University Library Resource Center

Cost Allocation Study

Submitted to the Office of the Comptroller

University of Pennsylvania

By

James Michalko

Library Business Administrator

October 1977

Preface

This University Library cost allocation study was carried out to provide data to the Comptroller's Office for purposes of determining costs applicable to grant and contract sponsored research. Two previous studies were performed to this purpose. The first study was done in 1966/67 by Warren Haas, Director of Libraries, and was intended to assign all library costs to either instruction or research purposes. This study analyzed acquisition, staff effort, circulation and building use. The results of these analyses were used to update library cost allocations until 1974. In 1974 a second study was carried out by Toby Heidtmann and James Michalko. This study relied on the acquisition analysis done in 1966 but added a number of refinements; principally the use of borrowing statistics collected by the automated circulation system which is used by the larger libraries on campus. Again, this study assigned costs to either instruction or research purposes.

The present study is a totally updated effort at assigning library costs, first, to the principal library activities of 1) Collection Processing and Maintenance, 2) Public Services and 3) Administration, and secondly, to either support of Undergraduate programs or the support of Faculty and Graduate students. This objective is more modest than that of previous studies. The Library does not have the perspective necessary to distinguish sponsored research from the various activities that constitute academic research. Rather than make such a final assignment, we have attempted to identify those costs incurred to support instructional programs. In this analysis we have chosen to equate instructional programs with undergraduate support.

Because we can confidently isolate these undergraduate costs we can, with equal confidence, derive the remainder that is spent in support of Faculty and Graduate students. The assignment of these Faculty and Graduate costs to sponsored research activity must be done by the Comptroller's Office. Such a breakdown can be done after the relevant central University support costs have been added to the direct library expenditures which are examined in this study.

Methodology

This study allocated all direct library expenditures for the 1977 fiscal year. The principal cost elements in the Library Resource Center that were analyzed included:

1) Salaries - Professional, Clerical, Hourly
2) Benefits
3) Current Expense - supplies, repairs, rentals and other operating expenses
4) Books and Periodicals
5) Binding

These cost elements are common to each facility within the Library Resource Center. Within each facility these costs were assigned to one of the two major library functions: 1) Collection Processing and Maintenance (CPM), or 2) Public Service (PS). The costs of these functions were further allocated by library to either Undergraduate or Faculty/Graduate support. The Public Service costs were allocated on the basis of circulation surveys. CPM costs were assigned on the basis of an analysis of book and periodical acquisitions.

Assignment of Library Cost Elements

The total direct costs of each library were arrived at using the University Comptroller's Office Report of Expenditures for the period ending June 30, 1977. The cost elements and the method of allocation are described below and summarized in Table 1.

Direct Allocations

1) Salaries

Professional and Clerical salaries were assigned to CPM or PS on the basis of individual duties. In the larger libraries these duties are unique and clearly defined. In smaller units where CPM and PS duties overlap, written job descriptions and interviews with responsible librarians provided an estimate of the staff effort devoted to each function.

Hourly and Student salaries were assigned to PS or CPM based on the portions of professional and clerical salaries devoted to each function within individual facilities. Since hourly and student work is assigned in support of the full-time staff this breakdown seemed to reflect the reality of individual responsibilities.

2) Benefits

Since Benefit costs are charged as a percentage of the salary base the assignment of benefit costs is a simple function of the allocation of salaries to CPM or PS.

3) Current Expenses

The accounts on which operating expenses were charged were examined for each facility and those items identifiable with CPM, PS, Administration, Central Processing or Bindery costs were directly assigned to these categories. For example, the costs of renting the Circulation Department computer were assigned directly to PS, the cost of membership in the Ohio College Library Center was assigned to Central Processing, the cost of catalog card stock and certain forms were assigned to CPM, etc. The remainder of Current Expenses that could not be specifically identified were assigned to either the PS or CPM function on the basis of the

percentage split between them in the salaries, benefits and identifiable current expense charges.

4) Books and Periodicals

The costs incurred in the purchase of books and periodicals, from restricted and unrestricted sources, were directly allocated to the individual purchasing library as a CPM cost.

5) Binding

The costs incurred for binding of materials at commercial binderies was directly assigned to the individual library as a CPM cost.

Indirect Allocations

Administrative salaries were derived from professional and clerical salaries. These salaries were defined as costs incurred in support of the entire Resource Center rather than individual facilities. This subset was later assigned to each library on the basis of its share of net direct costs. (Table 2, col. 1)

Central Processing and Bindery Costs were derived from the professional and clerical salaries assigned to the CPM function in the main Van Pelt Library. The Acquisition, Cataloging, Card Preparation, Searching and Library of Congress Cataloging Departments in Van Pelt constitute a Central Processing unit for most of the libraries in the Resource Center. Similarly, the Bindery Department in Van Pelt performs services for many of the departmental libraries. These Central Processing salaries combined with the current expense items incurred in support of Processing were assigned to the CPM cost component of each

facility on the basis of its share of volumes added to the collections. (Table 2, col. 2) Binding Department costs were allocated to individual libraries based on the share of total binding expenditures. (Table 2, col. 3)

Identification of Undergraduate Costs

CPM

Within each facility the fully allocated Collection Processing and Maintenance cost component was assigned to undergraduate users based on the results of the Acquisitions' Analysis (Table 2, col. 4) performed for each library. The remainder of the CPM cost component was assigned to Graduate student and Faculty users. (Table 3)

PS

The Public Service cost component of each library was allocated to undergraduate patrons based on the results of a Circulation Analysis. (Table 2, col. 5) In the larger libraries this analysis was based on computer collected data and in smaller departmental libraries a sample of the manual circulation file was used. (Table 3)

Results

The present analysis has yielded two ratios that will be useful for present and future purposes. Of the total fiscal 1977 library expenditures, 65% were spent in Collection Processing and Maintenance functions and 35% for Public Services. The Library Resource Center spent 24% in support of undergraduate programs and 76% in support of Graduate and Faculty activities.

Notes

- The Biddle Law Library, Fels Institute, and the University Archives were not included in this study.

- The expenditures for the Annenberg Library do not include professional or hourly salaries which are paid by the Annenberg School.

- Net Direct Costs for a facility was considered to be the sum of all salaries, benefits and current expense items exclusive of book and binding costs.

UNIVERSITY OF PENNSYLVANIA LIBRARIES

TABLE 1

	Salaries	Employee Benefits	Books	Binding	Current Exp Equipment	Total	
Van Pelt	1,880,090*	340,239*	615,996	102,409*	317,438*	3,256,172	Van Pelt
Annenberg	32,240	6,448	11,964	3,024	-	53,676	Annenberg
Biddle	-	-	-	-	-	-	Biddle
Biology	14,422	2,885	22,981	1,852	159	42,299	Biology
Chemistry	16,796	3,359	13,729	1,240	-	35,124	Chemistry
Dental	68,162	12,036	23,192	5,575	5,480	114,445	Dental
Fels	-	-	-	-	-	-	Fels
Fine Arts	150,629	28,580	59,297	8,435	6,683	253,624	Fine Arts
Lippincott	301,714	54,111	77,377	7,510	9,645	450,357	Lippincott
Math-Physics	39,493	7,148	42,201	3,516	1,101	93,459	Math-Physics
Medical	302,479	54,268	127,456	8,041	74,387 (50,204 Ex Cr)	516,427	Medical
Moore	30,214	5,334	17,694	1,647	1,222	56,111	Moore
Museum	42,784	7,844	23,036	4,492	389	78,545	Museum
Music	54,766	10,204	21,324	4,138	808	91,240	Music
Social Work	52,102	8,989	12,308	2,448	407	76,254	Social Work
Towne	58,161	10,798	74,995	6,139	7,020 (4,538 Ex Cr)	152,575	Towne
Veterinary	31,637	5,682	23,579	3,729	1,285	65,912	Veterinary
TOTAL	3,075,689 58%	557,925 10%	1,167,129 22%	164,195 3%	371,282 7%	5,336,220	

* Indirect allocations from Van Pelt expenditures are: Central Processing 882,211, Binding 58,085, Administration 241,419

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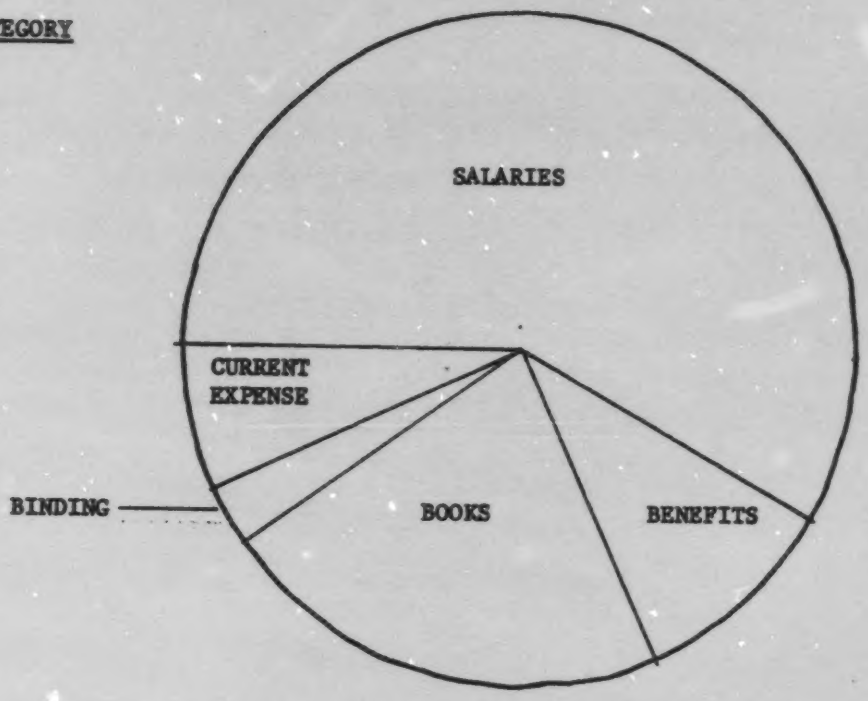
LIBRARY EXPENDITURES

BY CATEGORY



BY LIBRARY

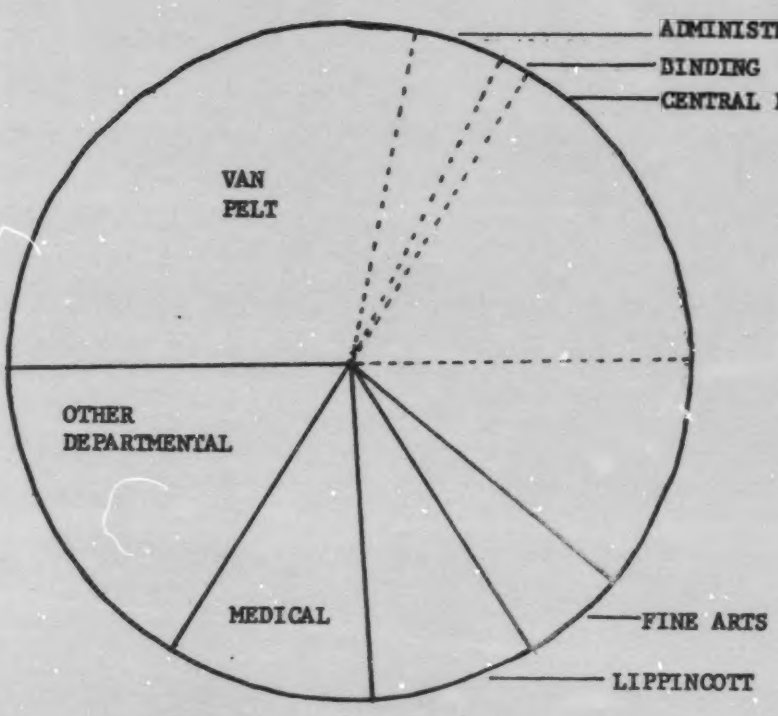


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TABLE 2
UNIVERSITY OF PENNSYLVANIA LIBRARIES
COST ALLOCATION STUDY

	Column 1	Column 2	Column 3	Column 4		Column 5	
				% of Materials Required For:		% of Circulation By:	
	% Net Direct Costs	% of Volumes Added	% of Binding Costs	Undergrad	Faculty/Grad	Undergrad	Faculty/Grad
Van Pelt	60.2%	78.7%	68.1%	25%	75%	40%	60%
Annenberg	n.a.	1.4%	2.0%	0%	100%	40%	60%
Biddle	-	-	-	-	-	-	-
Biology	0.5%	0.8%	1.2%	13%	87%	30%	70%
Chemistry	0.5	0.6%	0.8%	0%	100%	30%	70%
Dental	2.3%	n.a.	n.a.	0%	100%	10%	90%
Fels	-	-	-	-	-	-	-
Fine Arts	5.0%	3.8%	5.6%	11%	89%	33%	67%
Lippincott	9.8%	n.a.	5.0%	25%	75%	25%	75%
Math-Physics	1.3%	1.7%	2.3%	0%	100%	50%	50%
Medical	11.3%	n.a.	n.a.	0%	100%	33%	67%
Moore	1.0%	1.0%	1.1%	0%	100%	50%	50%
Museum	1.4%	4.2%	3.0%	15%	85%	50%	50%
Music	1.9%	2.1%	2.7%	10%	90%	50%	50%
Social Work	1.7%	1.4%	1.6%	8%	92%	40%	60%
Towne	2.1%	2.9%	4.1%	0%	100%	60%	40%
Veterinary	1.0%	1.4%	2.5%	0%	100%	0%	100%
TOTAL	100.0%	100.0%	100.0%				

n.a. = not applicable

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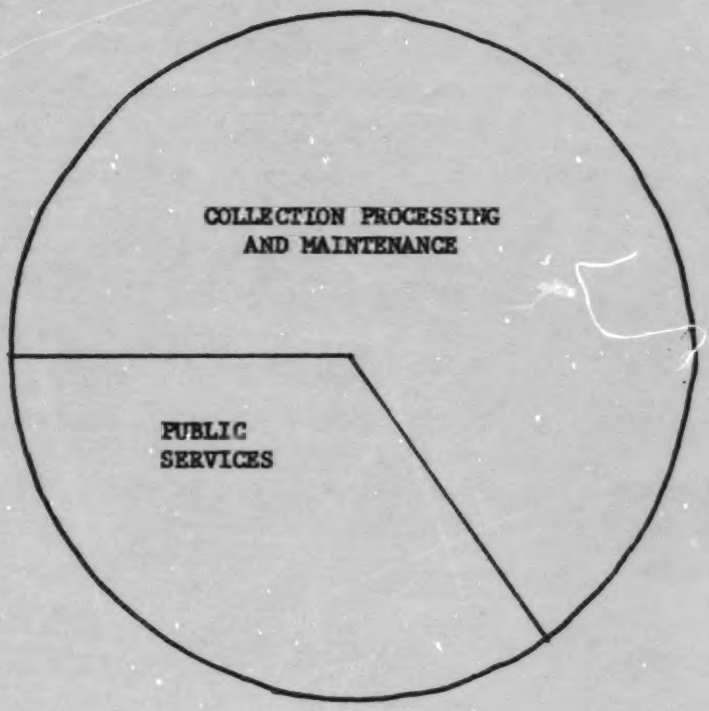
TABLE 3
UNIVERSITY OF PENNSYLVANIA LIBRARIES
COST ALLOCATION STUDY

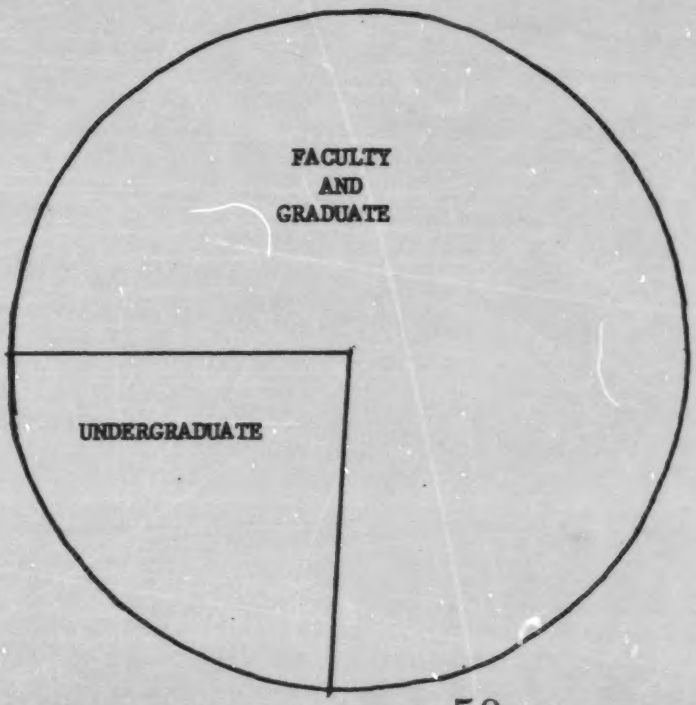
	Expenditures		Expenditures	
	CPM	PS	Undergraduate	Faculty/Graduate
Van Pelt	1,912,419	1,041,229	894,597	2,059,051
Annenberg	41,107	26,082	10,435	56,756
Biddle	--	--	--	--
Biology	40,056	11,205	8,568	42,693
Chemistry	24,999	17,090	5,127	36,962
Dental	100,601	19,397	1,940	118,058
Fels	---	--	--	--
Fine Arts	214,440	88,032	52,639	249,833
Lippincott	283,305	193,615	119,230	357,690
Math-Physics	93,310	19,621	9,811	103,120
Medical	276,192	267,515	88, 280	455,427
Moore	60,149	7,837	3,919	64,067
Museum	91,402	29,319	28,370	92,351
Music	70,949	44,972	29,581	86,340
Social Work	70,694	22,944	14,834	78,804
Towne	130,737	54,873	32,924	152,686
Veterinary	73,442	8,687	--	82,129
TOTAL	3,483,882 (65%)	1,852,418 (35%)	1,300,253 (24%)	4,035,967 (76%)

LIBRARY EXPENDITURES

BY ACTIVITY



BY USER



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University of Virginia

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Compiled by
J. Yeaman, U. Va.

Definitions

I. Faculty:

A. Instruction -

1. Faculty whose time is spent totally on instruction.
2. Faculty whose time is spent partly on instruction.

Both of above should be expressed in FTE.

Example:

a. A part-time professor teaching a 1/2 teaching load would be a 0.5 FTE.

b. A professor teaching 3/4 of his time and doing research 1/4 of time would = 0.75 FTE.

B. Research

1. Faculty and Senior Scientists and other Professional personnel spending their total time on Organized Research. (Each equals 1.0 FTE)
2. Faculty, Senior Scientists, and other professionals devoting part time to Organized Research. (Each spending 1/3 time on Research = 0.33 FTE)

C. Public Service

Faculty FTE's spent on Public Service activities.

II. Graduate Students:

A. Research

FTE's devoted to Organized Research.

B. Regular

FTE's devoted to non-research activities.

III. Undergraduates:

A. Research

FTE's devoted to Organized Research

B. Regular

FTE's devoted to other activities.

IV. Research Workers

Clerical, technical, and other non-professional FTE's devoted to Organized Research.

J. Yeaman

November 13, 1979

Mr. Jim Yeaman
1705 Old Forge Road
Charlottesville, Virginia 22901

Dear Mr. Yeaman:

Mr. Barney McGinty has referred your request for information to our area. Enclosed is the Library portion of Duke University's FY 1977-78 Indirect Cost Study for your review. Since we are in the process of revising our Library Study methodology for conformance with newly revised O.M.B. Circular A-21, I am also enclosing copies of library study procedures developed at U.S.C. and the University of Rochester. It is hoped that the three will assist you in developing and updating your own procedures.

You should note that for the purpose of the annual Indirect Cost Study, Duke University groups branch departmental libraries such as Chemistry, Biology, Physics and East Campus (Woman's College Library) into one General Library System, but treats Medicine, Law, Nursing and Divinity Libraries separately. Basically we are apportioning Medicine and Law Library direct and allocated expenses to a cost pool called Faculty-Graduate. Nursing and Divinity Libraries are similarly apportioned to another cost pool called Undergraduate. The remaining General Libraries expense is then broken out into such functions as Reader Services, Periodicals, Technical Processing etc. and each function is separately apportioned to either the Faculty-Graduate or Undergraduate cost pools based on various allocation methods. Once these two cost pools are loaded we allocate the Undergraduate pool 100% to Instruction and the Faculty-Graduate pool to both Instruction and Research. The allocation to Research is calculated based on the salaries and wages paid to Researchers divided by the total salaries and wages paid for Instruction and Research. The remainder of Faculty-Graduate pool expense is allocated to instruction. This is explained in greater detail in the enclosed materials.

If upon reading through the explanation and materials provided, you have questions regarding our methods and/or assumptions, please feel free to contact me at (919) 684-5804 or write in care of the below listed address.

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I hope the enclosures will be of benefit to you in preparing your Indirect Cost Study. We would be interested in the progress that you make in the area of Library analysis.

Sincerely,

UNIVERSITY OF VIRGINIA LIBRARY

Inter-Office Correspondence

Date: 26 January 1972

KGP

To Mr. James Yeaman

Dept. Division of Research Accounting and Control

From Kenneth G. Peterson
Associate Librarian

Dept. General Office

Subject: Contract research recovery costs for the Library.

Following up your phone call and the information you sent me last week, we phoned the headquarters of the Association of Research Libraries in Washington, D. C., to discuss the matter of contract research recovery costs for libraries. ARL had a committee during the early to mid-1960's that studied this subject quite thoroughly trying both to arrive at acceptable weighting factors for categories of users in relation to budgetary expenses, and to establish a formula basis for determining or testing reliability of recovery claims. The enclosed xerox copies of the committee's work describe some of its efforts, especially the "Z" formula designed by Raymond J. Woodrow of Princeton. Unfortunately, the "Z" formula did not prove very successful, and from the general decline of interest thereafter (as well as the comments passed along to me from the ARL office) it appears that the people working on this effort became frustrated.

It seems advisable that we should pursue the matter further here at U. Va., and I hope we might arrange a joint meeting with Mr. Fischer and Mr. Hunt. Although I do not want to appear negative to the suggestion that we poll people coming into the library about their status and purpose in using library materials, I question whether the results would be sufficiently inclusive and reliable to stand up under scrutiny. For instance, the library services many researchers who seek information by phone and to whom information or materials are sent by messenger service. Although the ARL committee wasn't successful with the formula approach I wonder whether this was the result of their efforts to devise something that would satisfy the needs of varying types of institutions rather than those of one specific university. My own inclination would favor trying to establish meaningful ratios between the major groups within the total university population (e.g. students, faculty, researchers, etc.) and the distribution of resources, hopefully thereby to isolate the major research interests on the one hand and the comparative distribution of resources on the other. Using this information as a basis, it might then be related to various categories of library expenditures and services to establish a justifiable percentage for recovery. This approach is very general and

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would certainly need quite precise definition. Perhaps you have already considered something along these lines.

I asked our Reference Department to research the literature in the field of library administration to see whether we could find any additional information. The only thing uncovered was a 1965 article by David C. Weber, who was then Associate Director of the Stanford University Libraries, in which he describes generally the approach which that institution used. Although a user-census was used at Stanford as one of the in-puts, the basic method seems to rely more strongly on an analysis of the population basis together with determination of internal allocation of resources.

I'd be glad to know your reactions to this information and hope we can arrange to discuss the whole matter further perhaps with Mr. Fischer and Mr. Hunt after you've had a chance to read the enclosed materials.

enclosures

cc: Mr. Irvin A. Fischer, Director
Division of Research Accounting

Mr. Ray C. Hunt, Jr.
University Comptroller

November 29, 1979

Mr. James H. Yeaman
University of Virginia
Office of Sponsored Programs
P.O. Box 3901, University Station
Charlottesville, Virginia 22903

Dear Mr. Yeaman:

Per your request, enclosed is a list of the activities we will be undertaking to increase our recovery from the library indirect cost pool. We are still in the early stages for this process and have not finalized anything.

Yours truly,

LIBRARY PLAN

Step One: Calculate circulation data instead of using only population for allocating costs.

Step Two: Separate Library budget into different functions, such as, Library Administration, Circulation, Acquisition, Department Libraries, etc. Allocate these separate areas by different bases more equitable than circulation. Each base to be determined in December with the Library people.

My Guesses: (All subject to audit)

General Library	-	Circulation
Special Collection	-	Users - Special survey
Circulation Services	-	Circulation
Reference	-	Users - Special Survey
Media Services	-	Users - Data should be available
Acquisitions	-	By physical number of acquisitions, (i.e., Chemistry, Classics, etc.) then by Research vs. Instr. $ in Dept.
Cataloging	-	Same as Acquisitions
Department Libraries	-	By Research vs. Instr. $ in Dept. or by Circulation, which ever is best for us.

November 12, 1979

Mr. James H. Yeaman
1705 Old Forge Road
Charlottesville, Virginia 22901

Dear Mr. Yeaman:

Mr. Scurlock was not correct in stating that [redacted] had one of the highest library indirect cost components in the country. However, I believe his statement reflects a common misunderstanding of our position. For many years, the percentage of our total indirect cost which represented the recovery of library costs was one of the highest in the country. However, it would appear this was a reflection of our low indirect cost rate rather than the high amount of our library recovery. As indicated below, a recent survey of peer institutions reveals that we are somewhat on the low side in the amount of our total library costs recovered.

Simply defined, our method of allocating library costs follows a two-stage approach. In the first stage, the librarians attempt to identify that portion of total library costs attributable to undergraduate instruction. The assumption is that the portion of library costs dedicated to undergraduate instruction can be determined with reasonable accuracy. The library uses a combination of user data and professional judgement to make these allocations. The remainder would therefore be attributable to graduate instruction, departmental research, and organized research. It would be difficult to distinguish between these uses. The second stage of our allocation process attempts to take the non-undergraduate portion of the library costs and determine the portion attributable to organized research. This is done by determining the ratio of organized research salaries to total direct salaries (instruction and departmental research, organized research, and public service). In actuality we use the lesser of a % determined on a salary & wage base versus a % determined on a population base. However, the latter method uses payroll data to determine the population breakdown so there is little difference between the two.

We will be reviewing our existing method in light of A-21 requirements. I suspect significant changes will be made. At the least, it will be codified so there is a clearer understanding of the methodology with greater emphasis on "formula" and less on professional judgement.

Yours very truly,

Controller

JSO:jg

ADAPTION OF UNIVERSITY OF CINCINNATI LIBRARY DISTRIBUTION METHOD

1. Determine cost of each library

   a. Allocate acquisition costs to each library based on Librarians' annual report.

   b. Allocate Olin Technical Services costs to each library based on their percentage of total volumes.

   c. Add library plant costs.

(The above is the procedure used previously to identify total costs per library. What follows is taken from Cincinnati's distribution technique.)

2. Sub-divide each library into -

   a. Undergraduate students)
   b. Graduate students) Based on Library's usage data
   c. Faculty)
   d. All other)

3. Allocate 2(a) - Undergraduate portion - based on undergraduate credit hours taught.

4. Subdivide 2(b) - Graduate students portion - into instruction and research based on total direct costs of instruction and research in those colleges having graduate students.

   a. Distribute the instructional part of 2(b) based on graduate credit hours taught.

   b. Distribute the research portion of 2(b) based on total research costs of those colleges.

5. Allocate 2(c) - Faculty portion based on faculty salaries.
   Allocate 2(d) - Total salaries excluding related activites.

Cincinnati excludes Law and Medicine from this process, presumably on the basis that they stand pretty much by themselves. We might want to consider whether something similar should be done with Law and Business.

DISTRIBUTION BASE PROBLEM

LIBRARY

The purpose of the problem is to demonstrate potential difficulties inherent in the distribution of cost. The distribution of costs should be thought of not only in terms of establishing an equitable base but whether or not a cost, even though it is an allowable cost, should be allocated via the indirect cost mechanism.

For example, electricity costs applicable to sponsored research areas are allowable indirect costs. However, in a special facility such as a nuclear accelerator or reactor the electricity costs occasioned by such machines would be abnormally high in relation to the more usual type project. Thus, the most equitable procedure in such instance is to separately meter the heavy electrical consumption for this particular item of equipment and charge it directly to the benefiting project(s). The normal electricity requirements in such case would be treated indirectly.

The following details the costs of the Library, as reflected on this year's financial statement, and the various costs allocated to Library on the indirect cost rate proposal. For the purpose of this problem, assume this is a long form indirect cost rate proposal and all unallowable costs, per se, have been eliminated.

Library Expense:

Salaries	$660,000
Books	370,000
Other Expenses	170,000
Total	$ 1,200,000

Allocated Indirect Costs:

Building Use Charges	30,000
Equipment Use Charges	12,000
Operation & Maintenance	115,000
General & Administrative	43,000
	$ 1,400,000

Apportionment

The University apportioned Library Costs based on weighted population utilizing statistics developed by the American Library Association in a 1947 survey of selected institutions. Faculty, graduate students, and all personnel charged to or participating in sponsored research were assigend a weighting of 2 while undergraduates were assigned a weighting of 1. This worked out as indicated in the chart below.

Groups	(1) FTE Pop.	(2) Weighting	(3) Col 1 x Col 2	(4) Ratio	(5) Amount
Faculty, Graduate Students & Research Workers	1,500	2	3,000	30.0%	$420,000
Undergraduate	7,000	1	7,000	70.0%	980,000
			10,000	100.0%	$1,400,000

An analysis of full time equivalents (F.T.E.) is as follows:

Faculty:		
Instructional	300	
Sponsored Reserach	100	400
Graduate Students:		
Sponsored Research (200 x 1.5)*	300	
Regular Students	600	900
Sponsored Research Workers:		
Research Associates, Research Assistants, etc.	100	
Technicians	60	
Secretarial, Clerical, etc.	40	200
Undergraduates		7,000
Population		8,500

*For the purposes of this problem only the Graduate Students employed under sponsored research constitute one F.T.E. unit per student and one half unit as a research worker.

As an accomodation to visiting scholars and in the interests of town/gown relationships the University issued Library Cards to those who had a reasonable basis for utilizing the Library. These privilege cards were automatically renewed at the beginning of the academic year if the Library had been used by holders during the prior twelve month period. Prior to the beginning of the academic year there were 1,700 holders of such cards, 300 were dropped for non-utilization during the prior twelve month period, and 200 new cards were issued up to June 30, 1973.

The amount apportioned to faculty, graduate students and other research workers was then distributed to research and instruction based on salaries and wages as follows:

	Salaries and Wages	Ratio	Amount
Research	$ 3,600,000	45%	$ 189,000
Instruction	4,400,000	55%	231,000
	$ 8,000,000	100%	$ 420,000 (x)

1. Comment on the methodology employed by the University
2. If you do not agree with the methodology, suggest what changes you would make and attempt to come up with the amount allocable to Sponsored Research.

SOLUTION
DISTRIBUTION BASE PROBLEM
LIBRARY

1. Since the weighting was predicated upon

   a.) An Outside Survey,
   b.) Was Not Representative,
   c.) Assumed that the institution was "average," and
   d.) The survey, in any event was badly dated,

   We would be compelled to assume that the weighting was totally irrelevant. In order to establish weighting, an institution must develop its own data and thoroughly document such data.

2. In this case the institution ignored the outside users.

3. Given the circumstances surrounding this case, an appropriate solution would be as follows:

GROUP	NO.	WEIGHTING	TOTAL	STUDENTS	INSTRUCTION	OUTSIDE USERS	SPONSORED RESEARCH
Faculty	400	1.0	400	-	300	-	100
Graduate Students:							
Research	200	1.5	300	200	-	-	100
Regular	600	1.0	600	600	-	-	-
Research Workers:							
*Faculty Equivalent	100	1.0	100	-	-	-	100
Undergrad	7,000	1.0	7,000	7,000	-	-	-
Outside Users	1,600	1.0	1,600	-	-	1,600	-
TOTALS			10,000	7,800	300	1,600	300

*Note: Technicians, Secretarial, Clerical etc. are dropped from the base since equivalent type staff in areas other than sponsored research are not included.

4. Sponsored Research develops a ratio of 3% (300/10,000).

   3% X $1,400,000 = $42,000

UNIVERSITY OF WASHINGTON

ANALYSIS OF POPULATION USING LIBRARY
YEAR ENDED JUNE 30, 1971

ANALYSIS OF POPULATION USING LIBRARY EXCLUDING UNDERGRADUATE		PER CENT OF TOTAL	ALLOCATION OF LIBRARY COSTS (AFTER EXCLUDING UNDERGRADUATE)
TOTAL ADJUSTED GRADUATE STUDENTS	5,909	38.25%	$1,466,969
POST-DOCTORAL TRAINEES (NOT ENROLLED)			
FEDERAL POST-DOCTORAL TRAINEES	329	2.13	81,690 (1)
NON-FEDERAL POST DOCTORAL TRAINEES	22	.14	5,369
TOTAL ADJUSTED UNIVERSITY FACULTY & STAFF PROGRAMS 11-20-67 and 80's	2,190	14.18	543,833
TOTAL OTHER PROGRAMS	6,367	41.22	1,580,875
FEDERAL TRAINEES (ENROLLED IN UNIVERSITY COURSES)	630	4.08	156,477 (1)
	15,447	100.00%	$3,835,213 (2)

DISTRIBUTION OF LIBRARY COSTS
PROGRAM 11-20-67 & 80's

	MAN-YEAR	PER CENT	TOTAL	TO SCHEDULE
FEDERAL ON-CAMPUS RESEARCH	1,369	56.0	$304,547	1
FEDERAL EDUCATIONAL AGREEMENTS	485	19.8	107,679 (1)	
PRIMATE CENTER	89	3.6	19,578	3A
APPLIED PHYSICS LABORATORY	128	5.2	28,279	3
ALL OTHER PROGRAMS	374	15.4	83,750	
	2,445	100.0	$543,833	

(1) TO SCHEDULE 1A

	$ 81,690
	156,477
	107,679
	$345,846

(2) FROM SCHEDULE 8A

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March 9, 1979

NACUBO Special Report 79-4

CIRCULAR A-21: COST PRINCIPLES FOR EDUCATIONAL INSTITUTIONS

OMB Circular A-21 was published in the Federal Register on March 6, 1979, and is reproduced in its entirety in this Special Report. Preceding the article is an introduction by Max A. Binkley, vice president for finance at Colorado State University. Dr. Binkley is a member of the subcommittee on government costing policies of the Committee on Governmental Relations.

INTRODUCTION

With release of OMB Circular A-21, institutions of higher education enter a new era of accountability and detailed cost accounting for federal grants and contracts. Publication of the Circular brings to an end, at least for the present, the prolonged discussions and negotiations on revision of the costing principles.

The final document is substantially more acceptable to higher education than was the initial proposal issued by OMB in March 1978. However, to the very end, government officials on one side and university representatives on the other did not reach accord on several issues. The resulting document bears earmarks of that outcome.

In the future, higher education undoubtedly will resume efforts to achieve more equitable reimbursement of costs and provision for less burdensome administration. At the moment, however, another task compels a higher priority: the job now at hand for the institutions is to prepare for compliance with the new costing principles. For a number of institutions, implementation will be a major undertaking. For all institutions it is a matter that cannot be neglected or deferred. The time to start the process is now.

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At each institution all aspects of the new principles require careful study with respect to application at the institution. Determination must be made of procedures that require changes in institutional practices. The entire project of planning and preparation must be considered in its many facets so that interrelationships of procedures are identified and tasks are defined. A schedule must be established and assignments must be made for the work to be accomplished; decisions need to be reached on alternative means of compliance; systems are to be designed, computer applications programmed, and instruction manuals prepared. If additional time is required for implementation of certain provisions, it will be necessary to obtain agreement with the cognizant agency. And there is need to educate faculty and staff on new requirements. All these steps are to be taken preparatory to implementation.

Not only is preparation a sizable task, it is also critical. The adequacy of the planning and preparation performed during the months ahead will have considerable import on the outcome of future years. Whether full claims for all reimbursable costs are made and sustained depends largely on how well the costs are determined and supported by the methods established during the preparations now to be carried out. How well an institution prepares itself will have significant bearing on the outcome of future audits.

Institutions must respond in a positive way to the challenge of the new level of accountability. The experience of past years is to be remembered: the media publicized adverse audit findings, costly refunds, and accusations of unresponsiveness to needed changes; the unfavorable publicity created Congressional pressure that forced stricter cost principles. A failure now to respond positively would ultimately lead to renewal of the same cycle of events. The well-being of higher education cannot afford to risk such an outcome.

Addressing the issues thoroughly and directly will set the stage for a more favorable reception in the future for the valid pleas of higher education for greater equity and relief from administrative burden.

OFFICE OF MANAGEMENT AND BUDGET

CIRCULAR A-21—COST PRINCIPLES FOR EDUCATIONAL INSTITUTIONS

This notice revises Federal Management Circular 73-8. It will be renumbered OMB Circular No. A-21. The revision originated from recommendations made by the Department of Health, Education, and Welfare after urging by the House and Senate Appropriations Committees.

On March 10, 1978, the Office of Management and Budget published a proposed revision in the FEDERAL REGISTER for comment. In response to the publication, we received approximately 300 letters from Members of Congress, Federal agencies, university administrators, faculty members, professional associations, and members of the public.

There follows a summary of the major comments grouped by subject, and a response to each, including a description of any changes made as a result of the comment. In addition to the changes described specifically, other changes have been made to improve clarity, readability, and precision; and to reduce the burden of compliance as much as possible.

For further information, contact Mr. John J. Lordan, Chief, Financial Management Branch, Office of Management and Budget, New Executive Office Building, 726 Jackson Place, N.W., Washington, D.C. 20503, (202) 395-6823.

PURPOSE

Comment. Several commentators pointed out that the proposed revision contained too much detail, and that it seemed to establish cost accounting procedures and instructions, rather than cost accounting principles.

Response. In our opinion, the revision does not change the fundamental nature of the Circular. It provised for more consistent treatment of costs, and clarifies many provisions that were considered too vague and which left the way open to widely varying interpretations. This subject is covered in more detail below in specific comments on other sections of the Circular.

Comment. Several commentators had a favorable reaction to the provision which says that agencies are not expected to place additional restrictions on individual items of cost.

Response. This provision remains in the Circular.

APPLICABILITY

Comment. Several commentators agreed with the provision which extends regulations of the Cost Accounting Standards Board to federally funded research and development centers operated by universities. This was a coordinated action with the CASB, which has exempted other work at universities from coverage.

Response. This provision remains in the Circular.

EFFECTIVE DATE

Comment. Several commentators pointed out the need for adequate time for implementation. Some suggested a two-year transition period.

Response. The Circular now establishes an effective date of October 1, 1979, and says that implementation will begin in the institution's first fiscal year beginning after that date. This can be speeded up or extended with the agreement of the cognizant Federal agency. We would expect this provision to be used to assure an orderly phase in of new provisions such as the accounting for tuition remission and specialized service facilities.

DEFINITION OF TERMS

Comment. Many commentators stated that "other sponsored activities" should not include agricultural extension programs, which had been cited as an example.

Response. This example has been removed from the Circular and we are now studying a request to exempt this program from coverage by the Circular.

INDIRECT COSTS

Comment. Many commentators objected to the inclusion of a standard allocation method to be used for each of the categories of indirect cost.

Response. The Circular has been revised to more clearly state that the standard allocation method is used only in the absence of a cost analysis study, or a mutual agreement between the institution and the cognizant agency on use of a different method.

Comment. Several commentators argued that it was inequitable to allocate depreciation on certain capital improvements on a standard base of unweighted headcount of students and employees.

Response. The unweighted headcount base has been replaced by a full-time equivalent base.

Comment. As proposed, the modified total direct cost base consisted of salaries and wages, fringe benefits, materials and supplies, travel, and subgrants and subcontracts up to $5,000 each. Several commentators proposed an increase in the dollar level of subgrants and subcontracts. Suggestions ranged from $10,000 to $50,000.

Response. The amount has been raised to $25,000.

Comment. A number of commentators objected to the use of the number of sponsored agreements as the standard base for allocating the costs of sponsored projects administration.

Response. The standard allocation base has been changed to modified total direct costs.

LIBRARY EXPENSES

Comment. Many commentators objected to the unweighted headcount base for allocating library expenses.

Response. The unweighted headcount base has been changed to the full-time equivalent base.

STUDENT ADMINISTRATION AND SERVICES

Comment. Several commentators objected that the Circular would not recognize student administration and service costs as applicable to the sponsored agreements. They contended that these services benefit all students, including those employed by the institution.

Response. The standard base for allocating student service costs would call for allocation to the instruction function, and subsequently to any sponsored agreement in that function.

DETERMINATION AND APPLICATION OF INDIRECT COSTS OR RATES

Comment. Several commentators objected to the use of modified total direct cost as the standard base for allocating indirect costs to sponsored agreements.

Response. The definition has been modified to include all subgrants and subcontracts up to $25,000 each.

COMPENSATION FOR PERSONAL SERVICES

Comment. Several commentators objected to the frequency of personnel activity reports.

Response. Compared to present requirements, frequency has been reduced from monthly to once an academic term. Also, the Circular has been clarified to explain that employees whose salaries and wages are not charged direct, or not involved in the distribution of indirect costs would not be included in the reporting system.

Comment. Several commentators criticized applying the monitored workload system only to professional employees.

Response. Introducing the monitored workload concept for professional employees recognizes that their activities cannot be measured with the same degree of accuracy as nonprofessionals. We believe that the monitored workload alternative represents a good balance between reducing paperwork and achieving an acceptable level of accountability.

DEPRECIATION AND USE ALLOWANCES

Comment. Several commentators stated that the requirement for a

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objectives in academic deans' offices, academic departments and divisions, and organized research institutes, study centers, and research centers. Departmental administration expenses are subject to the following limitations.

(1) Academic deans' offices. Salaries and operating expenses are limited to those attributable to administrative functions.

(2) Academic departments:

(a) The salaries of the heads of academic departments, divisions, and organized research units are limited to amounts attributable to their administrative duties. Salaries of professorial or professional staff, whose appointment or assignment require administrative work that benefits sponsored projects, may also be included to the extent that the portion so charged is clearly and specifically supported as required in Section J6.

(b) Other administrative and supporting expenses incurred within academic departments are allowable provided they are treated consistently in like circumstances. This would include expenses such as the salaries of secretarial and clerical staffs, the salaries of administrative officers and assistants, travel, office supplies, stockrooms, and the like.

(3) Other fringe benefit costs applicable to the salaries and wages included in (1) and (2) above are allowable, as well as an appropriate share of general administration and general expenses, operation and maintenance expenses, and depreciation and/or use allowances.

b. In the absence of the alternatives provided for in Section E2d, the expenses included in this category shall be allocated as follows:

(1) The administrative expenses of the dean's office of each college and school shall be allocated to the academic departments within that college or school on the modified total cost basis.

(2) The administrative expenses of each academic department, and the department's share of the expenses allocated in (1) above shall be allocated to the appropriate functions of the department on the modified total cost basis.

5. *Sponsored projects administration.*

a. The expenses under this heading are those that have been incurred by a separate organization(s) established primarily to administer sponsored projects, including such functions as grant and contract administration (Federal and Non-Federal), special security, purchasing, personnel administration, and editing and publishing of research and other reports. They include the salaries and expenses of the head of such organization, his assistants, and their immediate staff, together with the salaries and expenses of personnel engaged in supporting activities maintained by the organization, such as stock rooms, stenographic pools, and the like. The salaries of professorial or professional staff whose appointments or assignments involve the performance of such administrative work may also be included to the extent that the portion so charged to sponsored agreements administration is clearly identified and supported as required by Section J6. This category should also include the fringe benefit costs applicable to the salaries and wages included therein, an appropriate share of general administration and general expenses, the operation and maintenance expenses, and depreciation and use allowance. Appropriate adjustments should be made for services provided to other functions or organizations.

b. In the absence of the alternatives provided for in Section E2d, the expenses included in this category shall be allocated to the major functions of the institution under which the sponsored projects are conducted on the basis of the modified total cost of sponsored projects.

c. An appropriate adjustment shall be made to eliminate any duplicate charges to sponsored agreements when this category includes similar or identical activities as those included in the general administration and general expense category or other indirect cost items, such as accounting, procurement, or personnel administration.

6. *Library expenses.*

a. The expenses under this heading are those that have been incurred for the operation of the library, including the cost of books and library materials purchased for the library, less any items of library income that qualify as applicable credits under Section C5. The library expense category should also include the fringe benefits applicable to the salaries and wages included therein, an appropriate share of general administration and general expense, operation and maintenance expense, and depreciation and use allowances. Costs incurred in the purchases of rare books (museum-type books) with no value to sponsored agreements should not be allocated to them.

b. In the absence of the alternatives provided for in Section E2d, the expenses included in this category shall be allocated first on the basis of primary categories of users, including students, professional employees, and other users.

(1) The student category shall consist of full-time equivalent students enrolled at the institution, regardless of whether they earn credits toward a degree or certificate.

(2) The professional employee category shall consist of all faculty members and other professional employees of the institution, on a full-time equivalent basis.

(3) The other users category shall consist of all other users of library facilities.

c. Amounts allocated in b above shall be assigned further as follows: (1) The amount in the student category shall be assigned to the instruction function of the institution.

(2) The amount in the professional employee category shall be assigned to the major functions of the institution in proportion to the salaries and wages of all faculty members and other professional employees applicable to those functions.

(3) The amount in the other users category shall be assigned to the other institutional activities function of the institution.

7. *Student administration and services.*

a. The expenses under this heading are those that have been incurred for the administration of student affairs and for services to students, including expenses of such activities as deans of students, admissions, registrar, counseling and placement services, student advisers, student health and infirmary services, catalogs, and commencements and convocations. The salaries of members of the academic staff whose academic appointments or assignments involve the performance of such administrative or service work may also be included to the extent that the portion so charged is supported pursuant to Section J6. This expense category also includes the fringe benefit costs applicable to the salaries and wages included therein, an appropriate share of general administration and general expenses, operation and maintenance, and use allowances and/or depreciation.

b. In the absence of the alternatives provided for in Section E2d, the expenses in this category shall be allocated to the instruction function, and subsequently to sponsored agreements in that function.

8. *Offset for indirect expenses otherwise provided for by the Government.*

a. The items to be accumulated under this heading are the reimbursements and other payments from the Federal Government which are made to the institution to support solely, specifically and directly, in whole or in part, any of the administrative or service activities described in F1 through 7 above.

b. The items in this group shall be treated as a credit to the affected individual indirect cost category before that category is allocated to benefiting functions.

G. DETERMINATION AND APPLICATION OF INDIRECT COST RATE OR RATES

1. *Indirect cost pools.*

a. Subject to b below, the separate categories of indirect costs allocated to each major function of the institution as prescribed in Section f shall be aggregated and treated as a common pool for that function. The amount in each pool shall be divided by the distribution base described in G2 below to arrive at a single indirect cost rate for each function. The rate for each function is used to distribute indirect costs to individual sponsored agreements of that function. Since a common pool established for each major function of the institution, a separate indirect cost rate would be established for each of the major functions described in Section B1 under which sponsored agreements are carried out.

b. In some instances a single rate basis for use across the board on all work within a major function at an institution may not be appropriate. A single rate for research, for example, might not take into account those different environmental factors and other conditions which may affect substantially the indirect costs applicable to a particular segment of research at the institution. A particular segment of research may be that performed under a single sponsored agreement or it may consist of research under a group of sponsored agreements performed in a common environment. The environmental factors are not limited to the physical location of the work. Other important factors are the level of the administrative support required, the nature of the facilities or other resources employed, the scientific disciplines or technical skills involved, the organizational arrangements used, or any combination thereof. Where a particular segment of a sponsored agreement is performed within an environment which appears to generate a significantly different level of indirect costs, provision should be made for a separate indirect cost pool applicable to such work. The separate indirect cost pool should be developed during the regular course of the rate determination process and the separate indirect cost rate resulting therefrom should be utilized; provided it is determined that (1) such indirect cost rate differs significantly from that which would have been obtained under a. above, and (2) the volume of work to which such rate would apply is material in relation

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June 12, 1979

NACUBO Special Report 79-7

Analysis of Revised OMB Circular A-21

In the March 6, 1979 Federal Register, the Office of Management and Budget published a revision of OMB Circular A-21, the cost principles under which colleges and universities determine costs of federal contracts and grants. NACUBO distributed the document in Special Report 79-4, dated March 9, 1979.

A comprehensive analysis of the provisions of the new circular is published below. The analysis was prepared by Max A. Binkley, vice president for finance of Colorado State University. Dr. Binkley is a member of the A-21 Task Force which represented the NACUBO Committee on Governmental Relations during the revision process. The Task Force also served as faculty in recent NACUBO-COGR symposiums on the revised circular.

The author wishes to acknowledge the assistance of other members of the Task Force who reviewed and commented on the material published here: Franklin G. Riddle of Stanford University (chairman of the Task Force), Robert T. Baker of the California Institute of Technology, and Norman H. Gross of the University of California. At the time of writing, the viewpoints expressed here represented the best judgment of the author, supplemented by the perceptions of other members of the A-21 Task Force.

Three and a half years in preparation, revised OMB Circular A-21 contains new provisions for determining costs and securing reimbursements under federal contracts and grants. The revised document was released in the Federal Register of March 6, 1979 under the title "Principles for Determining Costs Applicable to Grants, Contracts, and Other Agreements with Educational Institutions." As a part of the revision, the principles revert to the earlier designation as A-21, which was the long-standing identity used until January 1974, when the label became FMC 73-8. Return to the A-21 designation is a stroke of luck for those who have never called the document anything else.

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The revised principles are effective for an institution at the start of the next institutional fiscal year beginning after October 1, 1979. OMB granted the delay in implementation in recognition of the modifications in administrative procedures which colleges and universities must make in order to comply with the new requirements. For many institutions, extensive systems changes are required, while all institutions undoubtedly must make some changes. Provision is made for earlier or later implementation of individual provisions by agreement between an institution and its cognizant federal agency.

Reasons for revision

As preparations are made, institutional personnel should recognize that revision of the cost principles was undertaken because both the government and the institutions desired changes. Government officials perceived the need to respond to several developments: criticism of lack of uniformity in costing; a flow of adverse audit findings; dissatisfaction with documentation of salary charges; and allegations of inappropriate indirect cost reimbursements. In addition, government agencies had developed new interpretations and applications that were not expressly stated in FMC 73-8, and were applying them as new standards of accountability (in many cases with retroactive effect).

Colleges and universities also desired a revision of the cost principles. Revision could bring relief from audit problems. It could provide protection from unreasonable contentions of government officials. A less burdensome system of salary distribution was needed. Institutions perceived the disallowance of certain costs, such as interest expense, to be inequitable. For these reasons the process of revising the principles was started in 1975.

The process of revision

There ensued prolonged discussions and negotiations during the course of which extensive proposals for revisions of the principles were made to OMB by DHEW and NACUBO-COGR.

On March 10, 1978 OMB published in the Federal Register its initial proposal for revision, inviting comments from interested parties. Input from higher education was substantial, with over 100 institutions submitting written comments to OMB. COGR submitted a 93-page response that recommended substantial modifications. A number of meetings were held with governmental representatives. Throughout the process several university presidents involved themselves directly through the Association of American Universities. Principal representation on behalf of the institutions consisted of AAU and COGR. The writer believes that throughout this lengthy process, higher education did as much as could be done to assure adequate consideration of the position of the institutions.

To the very end, accord was not reached between the government and the institutions on several issues. A number of institutional representatives, as well as some governmental agencies, urged delay in the release of the document to enable a joint task force to attempt to resolve the differences. However, OMB considered itself to be under pressure to publish -- especially pressure from Congress. OMB was concerned that already a lengthy period of time had expired. So it was that on March 6, 1979 the final version of the revised circular was published.

Because agreement had not been reached by the two sides, it was inevitable that the resultant A-21 bears earmarks of a compromise. Whatever imperfections it contains, the revised document has for the present finally been set in concrete. The job now is to prepare for compliance.

Evaluation

Although higher education failed to obtain a number of the provisions it was seeking, overall the new A-21 probably accommodates the positions of the institutions as much as could reasonably be expected under the circumstances. The provisions for increased accountability and documentation, while burdensome on the institutions, are manifestations of the environment in which the revision was developed. Publicity about adverse audit findings and alleged malfeasance put pressure on Congress, which in turn put pressure on the agencies. These developments occurred at a time when demands were growing for greater accountability in all aspects of public activity. Considering the background, the new A-21 could have been considerably more oppressive to colleges and universities, and would have been if the OMB proposal of March 1978 had been put into effect.

Financial effect

The net financial effect of the new document cannot be assessed dependably because too many uncertainties remain. Some clarifications of unclear provisions may be made by government officials in Washington. Also, much depends on local negotiations with cognizant agencies. Such determinations yet to be made will have considerably more impact than would have been the case under the March 1978 OMB proposal, which was aimed at a greater degree of rigid standardization.

Assessment of the financial effect is made difficult also by new provisions having offsetting consequences. There are features in the new A-21 that will tend to increase the recovery of costs, and there are other features that will work toward lesser recovery. A new provision states that federal agencies are not expected to place restrictions on individual items of cost beyond those stipulated in A-21. This should put an end to the practice of some agencies of placing arbitrary limitations on the reimbursement of indirect costs, and should increase the effective recovery of such costs. However, in the absence of an increased level of program funding by the government, no additional funds will flow to the institutions. In order to comply with the provision, agencies could elect to reduce programs or to require increased cost sharing.

Reimbursements to institutions may be increased under the new provision allowing depreciation or use allowance to be claimed on donated assets. Institutions using the simplified method of establishing an indirect cost rate may now include a claim for depreciation or use allowance.

Recovery of costs may be reduced as the result of several factors introduced in the revised principles, such as addition of cost sharing to the base for determination of the indirect cost rate, disallowance of a portion of rental costs if certain criteria are not met, and disallowance of depreciation or use allowance on equipment not in use.

As discussed later, several features of the new document require the incurring of greater administrative cost, while only a few changes may result in reduced administrative effort.

In the face of these various and sometimes counteracting provisions, [illegible] the only conclusion that can be made on the financial impact is the following: institutions may recover a relatively greater portion of *indirect* cost as measured under the revised principles, an effect that could be diminished or offset by reduction in programs or expansion of requirements for cost sharing. The administrative effort required of institutions will likely increase.

The test of equity

The document itself appears to intend a degree of equity similar to FMC 73-8, with little change in the historical allowability of cost categories or elements of cost. Whether agency policies and practices measure up to the spirit of the document remains to be seen.

The major flaw with regard to equity is the continued disallowance of the costs of interest, fund raising, and independent research and development to the extent they benefit federal programs. Especially important is the failure to allow interest expense. To deny reimbursement of interest expense necessarily incurred by an institution in order to perform a government project is to deny a real and essential cost. It forces the institution to subsidize a government project from other resources. It deprives institutions of higher education of a reimbursement that is granted to commercial contractors. The disallowance of interest expense has effectively been expanded in the new document because that disallowance appears to underlie some of the new restrictions on reimbursement of rental costs.

The questionable equity in requiring cost sharing remains an issue, but is one that lies outside the realm of A-21.

Additional administrative effort

More far-reaching is the criticism that can be leveled at the new document in regard to the significant additional administrative effort it will impose on institutions. There is reason to assert that at least some of the new requirements exceed what is necessary for adequate accountability. A prominent example exists in the extensive and virtually unattainable requirements for documentation under the monitored workload system of payroll distribution (even though a general provision regarding payroll distribution states that reasonable approximations are adequate).

Administrative effort is increased in the requirement to account for committed cost sharing; in the requirement for 100 percent of an individual's activity to be covered by the system of payroll distribution; in the requirement to normally allocate indirect cost to specialized service facilities; in the requirement to classify tuition remission as direct cost; in the requirement to measure the modified total direct cost of each major function and project; in the requirement to take equipment inventories every two years; in the requirement to determine that equipment is in use; and in the requirement for new determinations when assets are leased.

In contrast, the changes that will result in a decrease of administrative effort are relatively modest: reduction of the frequency of faculty activity reports and increase in the minimum capitalization level of equipment.

Greater rigidity

The new A-21 imposes more rigidity to the costing process than did FMC 73-8, but not nearly the extent proposed by the March 1978 OMB version. Compared with 73-8, rigidity is increased in the following examples. The indirect cost rate is required to be based on modified total direct cost, with other bases to be used only if greater equity can be demonstrated. Tuition remission must now be a direct cost if it applies to student employees whose salary is charged as a direct cost, in contrast to the option offered by 73-8 to treat the item as either a direct or an indirect cost. For the first time the principles require that indirect cost should normally be assigned to specialized service facilities.

In the absence of institutional cost analysis studies, specific bases are stated for the allocation of indirect cost groupings. However, under the March 1978 version the specific bases would have been given preferential status, imposing a much greater degree of rigidity. This change from the March 1978 version to the final document reflects greater recognition by the government of the need to match the cost principles to the structure of an institution, rather than bending the institutional structure to match the principles.

In certain respects rigidity may be construed as reduced in comparison with FMC 73-8. The section on payroll distribution now acknowledges the limitations inherent in the precision attainable in that major cost. The minimum capitalization level of equipment has been raised from $200 to $500.

The outlook for audit fiudings

The government and the institutions are hopeful the future will bring significant reduction in the extent of adverse audit comments and in the resultant bickering between the parties. Will advent of the new A-21 have this result? Much will depend on how diligently both parties adhere to the spirit of the provisions. If the institutions conscientiously and reasonably comply with the intent, and if government auditors apply reason and do not depart from the intent, relations between the parties should take a turn for the better. Compared with 73-8, many provisions of A-21 are stated more clearly and more specifically, an aspect that should result in less variation in interpretations.

There is reason to believe that most institutions will do a respectable job of implementation. They want to avoid reliving the experiences of the past. They are on notice as to what the new requirements are. This time they have received notice in advance. Institutions know that changes are necessary and they are given time to make the changes. There is reason also to be hopeful that government officials welcome the opportunity to apply the new criteria and avoid repetition of the past.

Unfortunately, the new A-21 contains some inconsistencies and in certain places lacks clarity. Were there not lapses in the document, a minimum of audit disputes might be hoped for. But some of the provisions can be expected to create new disputes or to continue old ones. The general statement recognizing the dual role of student employees is not well meshed with other provisions for cost allocations involving students. Only vague criteria are given for the determination of which services constitute specialized service facilities. No definition of subcontracts is provided. In the section on applicable credits, little has been done to clarify a controversy on revenue items. The provision that costs of departmental research do not have to be identified may be confused with the requirement to identify all costs of organized research. Under the monitored workload system of payroll distribution, the requirements for documentation of evidence of monitoring are excessive and unrealistic.

While the above lapses in the document may result in further disputes, the effect of the overall document may still be an improvement in the relations between the government and institutions of higher education. Much depends on the thoroughness of preparations for implementation and the reasonsableness of the parties thereafter.

Observations on specific provisions

At this point attention is turned to the specific provisions of the new A-21. The discussion focuses on noteworthy changes from FMC 73-8. Possible pitfalls are pointed out. Where options are available, they are described.

A new Paragraph c requires appropriate adjustment eliminating duplicate charges of a similar nature contained in other indirect cost categories. For example, if costs accumulated in sponsored projects administration expense include all costs of the purchasing function for sponsored projects, no purchasing costs applicable to other major functions should be included in the G&A expense allocated to sponsored agreements.

Section F-6, Library expenses

Paragraph b contains new provisions on allocation of library expenses in the event a cost study is not used. It stipulates that the expenses are first to be allocated on the basis of primary categories of users: student users, professional users, and all other users. Note that nonprofessional employees fall in the category of other users — an unfair constraint from an institutional viewpoint because it assumes that nonprofessionals do not use library facilities in support of research projects. Both student users and professional users are measured on a full-time-equivalent (FTE) basis. Under Section A-2c, to the extent that students are engaged in research projects, their activity may be considered applicable to the research function. Student employees who are professional employees may be construed as professional users.

Further allocations are described in Paragraph c. It specifies that the amount allocated to students (in their role as students) is assigned to the instruction function, the amount allocated to professional employees is further allocated to major functions on the basis of the professional salaries and wages applicable to the functions, and the amount allocated to other users is assigned to the category of other institutional activities.

Section F-7, Student administration and services

Paragraph a appeared in FMC 73-8 as Section D-1 of Attachment B. In 73-8, a related statement appeared in Section J-41 of Attachment A. The last sentence of that paragraph recognized students engaged in work under research agreements, saying a proportion of student services costs, based on hours, was allowable as a part of research administration expenses. No longer is that statement made in connection with student services expenses. However, if a cost analysis study is made, reference may be made to Section A-2c regarding the dual role of students.

It should be remembered that a cost analysis study performed under Section [illegible] may be used for any of the indirect cost categories. Through such a study found acceptable by the cognizant agency, student services expenses may be allocated in part to research.

Paragraph b states that in the absence of a cost analysis study, the expenses of student administration and services are to be assigned only to the instruction function. Paragraph b goes on to say that the costs are then allocated to sponsored agreements in that function. It does not give a basis for that final allocation, but presumably MTC or modified total direct costs (MTDC) would be acceptable.

Section F-8, Offsets

This section retains the previous requirement that any amounts otherwise received from the federal government to support any of the indirect cost categories must be used as an offset of the appropriate cost category before the cost category is allocated.

Section G, Determination of rate

Paragraph 1 contains a new sentence saying that an indirect cost rate is to be

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CORNELL UNIVERSITY LIBRARIES USE SURVEY
(Used in determining Overhead cost on Government Grants)

The Cornell University Libraries Use Survey covers three areas: (1) The Circulation Desk, (2) The Reference Desk and (3) Technical Services. We do not use a door check because this method proved unsatisfactory when it was tried.

The methods used to set-up the survey and instructions for each group are attached.

Also attached is a copy of the break-down submitted to the University for use in working our Indirect Cost Rates. You will note that separate reports are submitted for Endowed and Statutory Colleges.

CORNELL UNIVERSITY LIBRARY USE SURVEY
(Used in determining Overhead Cost for Government Grants)

Formula for setting up Random Sampling

The Use Survey is a RANDOM SAMPLING of Use at Circulation and Reference desks over a year. The setting up of the random sample for each Library is the most time consuming. It requires determining what hours and days the Circulation and Reference Departments are open throughout the year. This also applies to the Technical Services Department. Numbers are assigned to each hour starting with 0000.

The sample size for each department is determined by the following formula:

$$N = \frac{(1.96)^2 \quad (P) \quad (Q)}{d^2}$$

$(1.96)^2 = 3.84$
P = % research
Q = % non-research
$d^2 = .0018$
X = No. of samples during the year

N ÷ 20 (No. of cards to each Survey) = X

The samples are drawn by using "A Million Random Digits with 100,000 Normal Deviates."

We pick a number between 1 and 400, that is the page on which we start choosing numbers. A number between 1 and 50 is selected, that is the line on which the sampling is started, A number between 1 and 15 is then picked to start the sampling. From the listing of hours open it is determined at what number the survey ended and the number of pages. If the last page was 38 and the last number used was 44, the sampling would be taken between 0000 and 3844. Using these numbers we select at random the number of samples to be taken throughout the year. These numbers are then checked against the sheets giving hours open. If the first number selected was 0523 and the last number 3692, the first two numbers will represent the page and the next two numbers will be the number on the page, i.e. the survey will start on Sept. 3 at 1 p.m. When duplicate numbers come up we take the next number.

After the date and hour of survey is determined each Library and department receives the cards (which are numberd) to cover the alloted number of times the sampling is taken.

DAY	HOUR	#	DAY	HOUR	#	DAY	HOUR	#	DAY	HOUR	#
		00			25			50			75
		01			26			51			76
		02			27			52			77
		03			28			53			78
		04			29			54			79
		05			30			55			80
		06			31			56			81
		7			32			57			82
		8			33			58			83
		9			34			59			84
		10			35			60			85
		11			36			61			86
		12			37			62			87
		13			38			63			88
		14			39			64			89
		15			40			65			90
		16			41			66			91
		17			42			67			92
		18			43			68			93
		19			44			69			94
		20			45			70			95
		21			46			71			96
		22			47			72			97
		23			48			73			98
		24			49			74			99

077

CORNELL UNIVERSITY - LIBRARIES - LIBRARY USE SURVEY 1972-73

078

Nos.	Grad. Student (Ph.D.)	Grad. Student (Master)	Undergraduate Student	Faculty	Research Staff	Other	Agr.	B&PA	Hotel	Vet	Arch.	Educ.	ILR	Engr.	Arts & Sci.	Human Ec.	Law	Other	Research	Non-Research	TOTAL

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CORNELL UNIVERSITY LIBRARIES

LIBRARY USE SURVEY

TECHNICAL SERVICES SAMPLING

Procedure for the Collection of Data

The attached sampling schedule gives the times at which you are asked to gather data which will be used by the University in computing overhead rates for Federal research grants and contracts.

Enough margin has been provided in the design of the survey to allow for errors in sampling, minor variations in schedules, snow emergency days, or short building take-overs. If for any reason, you cannot take a sampling at its assigned time, please do not attempt to substitute some other time for it. In case this happens, just return the unused cards to Budget and accounting office with a note explaining what happened.

You have been provided with packs of prenumbered cards (see sample below).

OLIN

CORNELL UNIVERSITY LIBRARIES
LIBRARY USE SURVEY
TECHNICAL SERVICES

Date_____ No._____

Author_____

Title_____

Edition (if other than 1st)_____

Does this title fit in the category "Research"?
Yes____ No____

Name_____

079

Each card asks you to record the date on which titles are examined, as well as the following bibliographic information for each title: author, title, edition (if other than the 1st). It also asks for the person doing the examination to sign his or her name. Please make sure that each card is filled out completely, as it will be impossible to use cards which lack any of this information.

When your schedule calls for a sampling to be made, please select the first 20 titles from your receiving table, or mail bags, or whatever place your new acquisitions are gathered, before they are sent along to be processed. (Olin, see special instructions on this.) Please note that the schedule which was given to you indicates time at which samplings are to be started. If your schedule says "July 5, a.m." this means that starting in the morning of July 5, you are to select the first 20 titles from your receiving table. (Olin, see special instructions.) If you do not get 20 titles in the morning, continue however long it takes to reach 20, then stop until the following scheduled sampling time. If that time comes before you have filled out 20 cards, stop the first sampling and start the new one, no matter how few cards were filled out.

If your schedule calls for a sample to be taken at the end of the day, or the week, you do not get 20 cards filled out by the time the day or week is over, continue the sampling on the next day, until all your cards allotted for that sample are filled out, or until you are required to take a new sampling.

The card asks you to answer one question about each title: whether or not it was purchased for research. The attached criteria are to be used in answering that question. Please note that they are mutually exclusive. If a title fits under (1), that's it; it does not matter if it also fits under (3) or (4), or both. If it fits under (2), it does not matter if it also fits under (4) or (5). The sixth criterion should be used only in cases where the first five do not apply. If the person doing the analysis is not sure of how to answer that particular question, he or she should check with someone else who might know. There are few enough titles involved over a one-year period to allow this. (Olin, see special instructions.)

Please return all cards to Budget & Accounting Office as soon as they are filled in as possible. Please be sure to communicate to him any changes in your procedures which would make the continuation of the survey difficult, or any problems which you may have. Your comments will help us in preparing next year's survey.

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Special Instructions for Olin

You have been given a schedule which differs from the others to account for the variety or procedures in your department which come into account. Beginning at the times indicated, please ask the clerk at the receiving table to fill out and insert a card for the first 20 titles which she gets, including the last two lines. Next, ask her to take the books to Susan Gauck who will complete the process.

In case of books ordered for branch libraries for which she cannot answer the question on the card, Susan Gauck is to send those cards to the branch librarian concerned who will complete them and return them to Budget & Accounting Office.

Please note that books ordered for the I&LR Library are to be excluded from your share of the survey, since these will be sampled elsewhere.

Blanket order titles are to be held in their regular place until the librarian concerned has had a chance to look them over. He or she then can complete the cards, have them returned to Budget & Accounting Office.

All monographic series titles, except those ordered for Uris are to be classified as "Research".

Criteria to be Used in Classifying Books as "Research" or "Non-Research"

1. All books purchased for the Uris Library will be classified as "non-research".

2. All books purchased for a reserve collection will be classified as "non-research".

3. All books in foreign languages will be classified as "research".

4. Publications of specialized research agencies will be classified as "research".

5. Publications of a documentary nature (reports of union conventions, proceedings, government publications) will be classified as "research".

6. All publications not classifiable within the above categories will be handled in the following way:

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The individual examining each publication will ask himself the following question--"If the University had no instructional program dealing with the subject matter of this book, would it still be purchased?" If the answer is yes, the publication will be classified as "research". If not, it will be classified as "non-research".

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CORNELL UNIVERSITY LIBRARIES

LIBRARY USE SURVEY

Procedures for the Collection of Data

The following instructions apply to the collection of data in both circulation and reference departments. In order to satisfy the requirements of Federal auditors, each function must be sampled separately. Please do not mix the sampling schedules. They are not interchangeable.

Enough margin has been provided in the design of the survey to allow for errors in sampling, minor variations in schedules, snow emergency days, or short building take-overs. If for any reason, you cannot take a sampling at its assigned time, please do not attempt to substitute some other time for it. In case this happens, just return the unused cards to Budget & Accounting Office with a note explaining what happened.

You have been provided with sampling schedules for the circulation and/or reference functions in your library. Each must be handled separately from the other, even at times when the schedules call for both functions to be sampled simultaneously.

You have also been provided with packs of prenumbered cards (see the samples below). These cards ask the same information of a patron, whether he is charging out a book or asking a reference question, namely his status, college affiliation at Cornell, and name. Please make sure that each user fills in his name as it will be impossible to use cards without this information.

FAL

CORNELL UNIVERSITY LIBRARIES
LIBRARY USE SURVEY - CIRCULATION

Date_____ No. 478

___Cornell ___Non-Cornell

If Cornell, check status:	Circle school or college:		
___Graduate (PhD)	Agr.	Arch.	Arts&Sci.
___Graduate (Master)	B&PA	Educ.	HumanEc.
___Undergraduate	Hotel	ILR	Law
___Faculty	Vet.	Engr.	
___Research staff	Other_____		
___Other_____			

Name_____
(Please print)

083

CORNELL UNIVERSITY LIBRARIES Vet.
LIBRARY USE SURVEY - REFERENCE

Date_____ No._____
____Cornell ____Non-Cornell

If Cornell, check status:	Circle school or college:		
___Graduate (PhD)	Agr.	Arch.	Arts&Sci.
___Graduate (Master)	B&PA	Educ.	HumanEc.
___Undergraduate	Hotel	ILR	Law
___Faculty	Vet.	Engr.	
___Research staff	Other_____		
___Other_____			

Name_____
(Please print)

When your schedule calls for a sampling to be made, please ask the first twenty patrons who charge out a book, in case of the circulation study, or who ask a reference question, in case of the reference study, to fill out a card. In some cases it will take just a few minutes to get the twenty cards filled out and, in others, a few hours or even days. If your schedule calls for a sampling to be made, for example, at 4 p.m. on September 15, 1975, and again at 6 p.m. on the same day, and if you do not get twenty cards filled out during that time, stop the first sampling at 6 p.m. and start the new one, no matter how few cards were filled out between 4 and 6 p.m.

If your schedule calls for a sample to be taken at the end of the day, or the week, and you do not get twenty cards filled out by the time the day or week is over, continue the sampling on the next day, until all your cards allotted for that sample are filled out, or until you are required to take a new sampling.

If your library is one in which several departments answer reference questions, and keep statistical records of the questions asked, allocate your cards between them, or keep the cards in a central location and be sure to inform all staff members concerned of the times at which a survey of concern to them is being made.

In case of the circulation study, please ask any user, except borrowers of books from the reserve collection, who charges out a book to fill out a card. This sampling applies only to general circulation.

Finally, return all cards to Budget & Accounting Office as soon after they are filled in as possible. Please be sure also to communicate ~~to him~~ any important scheduling changes which your library may make. The present schedules are estimates based on previous practice and any extensive changes in them will necessitate a modification of the relevant sampling schedules.

CB/kd
6/15/75

CORNELL UNIVERSITY LIBRARIES

Library Expense and Use Information
Endowed 1975-76

Location	1975-76 Expenditures	1975-76 % Research	1975-76 $ Research
Salaries & Wages			
Business	78,181	50.0	39,091
Engineering	65,711	63.6	41,792
Fine Arts	65,593	39.0	25,581
Hotel	27,670	30.0	8,301
Law	79,216	25.0	19,804
Olin - except Reference	341,289	51.0	174,057
Olin - Reference	154,882	38.0	58,855
Physical Sciences	66,890	55.0	36,790
Uris	223,936	20.6	46,131
Math*	15,162	40.9	6,201
Music*	40,160	40.9	16,425
Africana*	30,809	0	0
Special Research Collections**	238,426	100.0	238,426
Sub-total	1,427,925	49.8	711,454
Technical Services			
Law	99,955	100.0	99,955
Olin	1,041,396	87.0	905,975
Sub-total	1,141,351	88.1	1,005,930
Sub-total Public Services and Tech, Services	2,569,276	66.8	1,717,384
Administration	299,962	66.8	200,375
Total Salaries & Wages	2,869,238 ***	66.8	1,917,759
Books			
Law	206,616	100.0	206,616
Olin****	1,320,553	87.0	1,148,881
Total	1,527,169	88.7	1,355,497
General Expense*****	445,301	66.8	297,461
Grand Total	4,841,708	73.7	3,570,717

* Not in survey because of size.

** Department of Manuscripts and Archives, Rare Books, Icelandic, History of Science and Wason Collection.

*** Salaries of $27,670 for Hotel not part of University Library Accounting Report. This does not include $58,567 of Salary funds paid by Government grants; $22,859 salaries and wages paid by S.E. Asia Program; nor does it include the portion of salaries paid to Library personnel by other departments.
FRINGE BENEFITS NOT INCLUDED

**** The Olin figure for books cover purchases for all departmental and college libraries on the Endowed campus (including $10,573 for Hotel). The following have been excluded from the figure for books: Library Associates $17,619; Government grant $1,918; NDEA funds transferred from S.E. Asia $20,000 and $11,409 from China-Japan.

***** General Expense excludes $51,490 Capital Equipment and $8,062 Goverrment Grants

All figures in this report have been reconciled to 1975-76 EXPENSE BY BUDGET CATEGORY UNIVERSITY LIBRARY, pages 161 and 162.

Medical College Library figures NOT INCLUDED.

The money expended for our Rare Book Department has not been spent on Museum items, but for material of research value. In fact the materials we have are basic research tools. We have and have had Government grants as follows to support work materials in our Lafayette Collection:
USA/GSA/NHPC grants:

10/1/71 - 12/1/72	$ 35,135	
12/1/72 - 4/30/74	36,000	
1974-75	36,895	
1/28/75	33,500	
7/1/75 - 6/30/76(extended)	46,700	
12/1/75 - 12/31/77	11,948	
1/1/76 - 12/31/77	80,000	

NEH grant:

1976-77	34,273	Indirect Cost 15,735.64